













A

GENERAL COLLECTION

OF THE

BEST AND MOST INTERESTING

VOYAGES AND TRAVELS

IN ALL PARTS OF THE WORLD;

MANY OF WHICH ARE NOW FIRST TRANSLATED INTO ENGLISH

*DIGESTED ON A NEW PLAN.*

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BY JOHN PINKERTON,

AUTHOR OF MODERN GEOGRAPHY, &c &c.

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ILLUSTRATED WITH PLATES.

VOLUME THE ELEVENTH.

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LONDON:

PRINTED FOR LONGMAN, HURST, REES, ORME, AND BROWN, PATERNOSTER-ROW;  
AND CADELL AND DAVIDS, IN THE STRAND.

1812.



A  
GENERAL COLLECTION  
OF  
VOYAGES AND TRAVELS

*THE ASIATIC ISLANDS, AUSTRALASIA, AND POLYNESIA.*

**O**MITTING the more ancient accounts of the Asiatic Islands (namely the Philippines, Borneo, Celebez, the Sumatran Chain, and the Moluccas) from that of Pigafotta, who accompanied Magellan, the first circumnavigator, as being rather curious than interesting at the present period, our Accounts shall begin with that of our great countryman Dampier, the Cook of a former age.

DAMPIER'S ACCOUNT OF THE PHILIPPINES.\*

**CHAPTER I.**—*They resolve to go to Mindanao. — Their Departure from Guam. — Of the Philippine Islands. — The Isle Luconia, and its chief Town and Port, Manilo, Manila, or Manilbo. — Of the rich Trade we might establish with these Islands. — St. John's Island. — They arrive at Mindanao. — The Island described. — Its Fertility. — The Libby Trees, and the Sago made of them. — The Plantain Tree, Fruit, Liguor, and Cloth. — A smaller Plantain at Mindanao. — The Boqano. — Of the Clove-Bark, Cloves and Nutmegs, and the Methods taken by the Dutch to monopolize the Spices. — The Betel Nut, and Areck Tree. — The Durien, and the Jaca Tree and Fruit. — The Beasts of Mindanao. — Centepces, or Forty Legs, a venomous Insect, and others. — Their Fowls, Fish, &c. — The Temperature of the Climate, with the Course of the Winds, Tornadoes, Rain, and Temper of the Air throughout the Year.*

**W**HILE we lay at Guam, we took up a resolution of going to Mindanao, one of the Philippine Islands, being told by the friar and others that it was exceedingly well stored with provisions, that the natives were Mahometans, and that they had formerly a commerce with the Spaniards, but that now they were at war with them.

\* From his *Voyages*, vol. i. 7th edit. 1729, 4 vols. 8vo. The chapters are numbered in the order they are now printed. A new edition of this valuable work is wanted, arranged in the order of the countries described.

This island was therefore thought to be a convenient place for us to go ; for besides that it was in our way to the East Indies, which we had resolved to visit, and that the westerly monsoon was at hand, which would oblige us to shelter somewhere in a short time, and that we could not expect good harbours in a better place than in so large an island as Mindanao : besides all this, I say, the inhabitants of Mindanao being then, as we were told (though falsely) at wars with the Spaniards, our men, who it should seem were very squeamish of plundering without licence, derived hopes from thence of getting a commission there from the Prince of the island, to plunder the Spanish ships about Manila, and so to make Mindanao their common rendezvous. And if Captain Swan was minded to go to an English port, yet his men, who thought he intended to leave them, hoped to get vessels and pilots at Mindanao fit for their turn, to cruize on the coast of Manila. As for Captain Swan, he was willing enough to go thither, as best suiting his own design ; and therefore this voyage was concluded on by general consent.

Accordingly June 2d, 1686, we left Guam, bound for Mindanao. We had fair weather and a pretty smart gale of wind at east for three or four days, and then it shifted to the south-west, being rainy ; but it soon came about again to the east and blew a gentle gale : yet it often shuffled about to the south-east ; for though in the East Indies the winds shift in April, yet we found this to be the shifting season for the winds here ; the other shifting season being in October sooner or later all over India. As to our course from Guam to the Philippine islands, we found it, as I intimated before, agreeable enough with the account of our common drafts.

The 21st day of June we arrived at the island St. John, which is one of the Philippine islands. The Philippines are a great company of large islands, taking up about thirteen degrees of latitude in length, reaching near upon from the third degree of north latitude to the nineteenth degree, and in breadth about six degrees of longitude. They derive this name from Philip II. King of Spain ; and even now do they most of them belong to that crown.

The chiefest island in this range is Luconia, which lies on the north of them all. At this island Magellan died on the voyage that he was making round the world. For after he had passed those straits between the south end of America and Terra del Fuego, which now bear his name, and had ranged down in the South Seas on the back of America ; from thence stretching over to the East Indies, he fell in with the Ladrone Islands, and from thence steering east still, he fell in with these Philippine Islands, and anchored at Luconia, where he warred with the native Indians, to bring them in obedience to his master the King of Spain, and was by them killed with a poisoned arrow. It is now wholly under the Spaniards, who have several towns there. The chief is Manila, which is a large sea-port town near the south-east end, opposite to the island Mindora. It is a place of great strength and trade : the two great Acapulco ships before mentioned fetching from hence all sorts of East India commodities ; which are brought hither by foreigners especially by the Chinese and the Portuguese. Sometimes the English merchants of Fort St. George send their ships hither as it were by stealth, under the charge of Portuguese pilots and mariners ; for as yet we cannot get the Spaniards there to a commerce with us or the Dutch, although they have but few ships of their own. This seems to arise from a jealousy or fear of discovering the riches of these islands ; for most, if not all, the Philippine islands are rich in gold, and the Spaniards have no place of much strength in all these islands, that I could ever hear of, besides Manila itself. Yet they have villages and towns on several of the Islands, and padres or priests to instruct the native Indians, from whom they get their gold.

The Spanish inhabitants, of the smaller islands especially, would willingly trade with



us if the government was not so severe against it ; for they have no goods but what are brought from Manilo at an extraordinary dear rate. I am of the opinion that if any of our nations will seek a trade with them, they would not lose their labour ; for the Spaniards can and will smuggle (as our seamen call trading by stealth) as well as any nation that I know ; and our Jamaicans are to their profit sensible enough of it. And I have been informed that Captain Goodlud of London, in a voyage which he made from Mindanao to China, touched at some of these islands, and was civilly treated by the Spaniards, who bought some of his commodities, giving him a very good price for the same.

There are about twelve or fourteen more large islands lying to the southward of Luconia ; most of which, as I said before, are inhabited by the Spaniards. Besides these, there are an infinite number of small islands of no account, and even the great islands, many of them are without names ; or at least so variously set down, that I find the same islands named by divers names.

The island St. John and Mindanao are the southernmost of all these islands, and are the only islands in all this range that are not subject to the Spaniards.

St. John's Island is on the east side of the Mindanao, and distant from it three or four leagues. It is in latitude about seven or eight degrees north. This island is in length about thirty-eight leagues, stretching north-north-west and south-south-east, and it is in breadth about twenty-four leagues in the middle of the island : The northernmost end is broader, and the southernmost is narrower. This island is of a good height, and is full of many small hills. The land at the south-east end, where I was ashore, is of a black fat mould ; and the whole island seems to partake of the same fatness, by the vast number of large trees that it produceth ; for it looks all over like one great grove.

As we were passing by the south-east end we saw a canoe of the natives under the shore ; therefore one of our canoes went after to have spoken with her ; but she run away from us, seeing themselves chased, put their canoe ashore, leaving her, fled into the woods, nor would be allured to come to us, although we did what we could to entice them ; besides these men, we saw no more here, nor sign of any inhabitants at this end.

When we came on board our ship again, we steered away for the island Mindanao, which was now fair in sight of us, it being about ten leagues distant from this part of St. John's. The twenty-second day we came within a league of the east side of the island Mindanao, and having the wind at south-east we steered toward the north end, keeping on the east side, till we came into the latitude of seven degrees forty minutes, and there we anchored in a small bay, about a mile from the shore, in ten fathom water, rocky foul ground.

Some of our books gave us an account that Mindanao city and isle lies in seven degrees forty minutes. We guessed that the middle of the island might lie in this latitude, but we were at a great loss where to find the city, whether on the east or west side. Indeed, had it been a small island, lying open to the eastern wind, we might probably have searched first on the west side ; for commonly the islands within the tropics, or within the bounds of the trade-winds, have their harbours on the west side, as best sheltered ; but the island Mindanao being guarded on the east side by St. John's island, we might as reasonably expect to find the harbour and city on this side, as any where else ; but coming into the latitude in which we judged the city might be, found no canoes or people that might give us any umbrage of a city, or place of trade near at hand, though we coasted within a league of the shore.

The island Mindanao is the biggest of all the Philippine islands, except Luconia. It is about sixty leagues long, and forty or fifty broad. The south end is in about five degrees north, and the north-west end reacheth almost to eight degrees north. It is a very mountainous island, full of hills and valleys. The mould in general is deep and black, and extraordinary fat and fruitful. The sides of the hills are stony, yet productive enough of very large tall trees. In the heart of the country there are some mountains that yield good gold. The valleys are well moistened with pleasant brooks, and small rivers of delicate water; and have trees of divers sorts flourishing and green all the year. The trees in general are very large, and most of them are of kinds unknown to us.

There is one sort which deserves particular notice, called by the natives libby trees. These grow wild in great groves of five or six miles long, by the sides of the rivers. Of these trees sago is made, which the poor country people eat instead of bread three or four months in the year. This tree for its body and shape is much like the palmeto tree or the cabbage tree, but not so tall as the latter. The bark and wood is hard and thin like a shell, and full of white pith, like the pith of an elder. This tree they cut down, and split it in the middle and scrape out all the pith, which they beat lustily with a wooden pestle in a great mortar or trough, and then put it into a cloth or strainer held over a trough; and pouring water in among the pith, they stir it about in the cloth: so the water carries all the substance of the pith through the cloth down into the trough, leaving nothing in the cloth but a light sort of husk, which they throw away; but that which falls into the trough settles in a short time to the bottom like mud; and then they draw off the water and take up the muddy substance, wherewith they make cakes; which being baked proves very good bread.

The Mindanao people live three or four months of the year on this food for their bread-kind. The native Indians of Teranate and Tidore, and all the spice-islands, have plenty of these trees, and use them for food in the same manner, as I have been informed by Mr. Caril Rofy, who is now commander of one of the King's ships. He was one of our company at this time; and being left with Captain Swan at Mindanao, went afterwards to Teranate, and lived there among the Dutch a year or two. The sago which is transported into other parts of the East Indies is dried in small pieces, like little seeds or comfits, and commonly eaten with milk of almonds, by those that are troubled with the flux; for it is a great binder, and very good in that distemper.

In some places of Mindanao there is plenty of rice; but in the hilly land they plant yams, potatoes, and pumpkins; all which thrive very well. The other fruits of this island are water-melons, musk-melons, plantains, bonanoes, guavas, nutmegs, cloves, betel-nuts, d'urians, jacks, or jacas, cocoa-nuts, oranges, &c.

The plantain I take to be the king of all fruit, not except the coco itself. The tree that bears this fruit is about three feet, or three feet and an half round, and about ten or twelve feet high. These trees are not raised from seed (for they seem not to have any), but from the roots of other old trees. If these young suckers are taken out of the ground, and planted in another place, it will be fifteen months before they bear, but if let stand in their own native soil they will bear in twelve months. As soon as the fruit is ripe the tree decays, but then there are many young ones growing up to supply its place. When this tree first springs out of the ground, it comes up with two leaves; and by that time it is a foot high, two more spring up in the inside of them, and in a short time after two more within them; and so on. By that time the tree is a month old, you may perceive a small body almost as big as one's arm, and then there are eight or ten leaves, some of them four or five feet high. The first

leaves that it shoots forth are not above a foot long, and half a foot broad; and the stem that bears them no bigger than one's finger; but as the tree grows higher the leaves are larger. As the young leaves spring up in the inside, so the old leaves spread off, and their tops droop downward, being of a greater length and breadth, by how much they are nearer the root, and at last decay and rot off: but still there are young leaves spring up out of the top, which makes the tree look always green and flourishing. When the tree is full grown, the leaves are seven or eight feet long, and a foot and half broad; towards the end they are smaller, and end with a round point. The stem of the leaf is as big as a man's arm, almost round, and about a foot in length, between the leaf and the body of the tree. That part of the stem which comes from the tree, if it be the outside leaf, seems to inclose half the body as it were with a thick hide; and right against it, on the other side of the tree, is another such answering to it. The next two leaves in the inside of these, grow opposite to each other in the same manner, but so that if the two outward grow north and south, these grow east and west, and those still within them keep the same order. Thus the body of this tree seems to be made up of many thick skins, growing one over another, and when it is full grown, there springs out of the top a strong stem, harder in substance than any other part of the body. This stem shoots forth at the heart of the tree, is as big as a man's arm, and as long; and the fruit grows in clusters round it, first blossoming and then shooting forth the fruit. It is so excellent that the Spaniards give it the pre-eminence of all other fruit, as most conducing to life. It grows in a cod about six or seven inches long, and as big as a man's arm. The shell, rind or cod is soft, and of a yellow colour when ripe. It resembles in shape a hog's-gut pudding. The inclosed fruit is no harder than butter in winter, and is much of the colour of the purest yellow butter. It is of a delicate taste, and melts in one's mouth like marmalade. It is all pure pulp, without any seed, kernel or stone. This fruit is so much esteemed by all Europeans that settle in America, that when they make a new plantation, they commonly begin with a good plantain-walk, as they call it, or a field of plantains; and as their family increaseth, so they augment the plantain walk, keeping one man purposely to prune the trees, and gather the fruit as he sees convenient. For the trees continue bearing, some or other, most part of the year; and this is many times the whole food on which a whole family subsists. They thrive only in rich fat ground, for poor sandy will not bear them. The Spaniards in their towns in America, as at Havana, Cartagena, Portobel, &c. have their markets full of plantains, it being the common food for poor people: their common price is half a rial, or three pence a dozen. When this fruit is only used for bread, it is roasted or boiled when it's just full grown, or not yet ripe or turned yellow. Poor people or negroes, that have neither fish nor flesh to eat with it, make sauce with cod-pepper, salt and lime juice, which makes it eat very savory; much better than a crust of bread alone. Sometimes for a change they eat a roasted plantain, and a ripe raw plantain together, which is instead of bread and butter. They eat very pleasant so, and I have made many a good meal in this manner. Sometimes our English take five or seven ripe plantains, and mashing them together, make them into a lump, and boil them instead of a bag-pudding; which they call a buff-jacket: and this is a very good way for a change. This fruit makes also very good tarts; and the green plantains sliced thin and dried in the sun and grated, will make a sort of flour which is very good to make puddings. A ripe plantain sliced and dried in the sun may be preserved a great while; and then eat like figs very sweet and pleasant. The Darien Indians preserve them a long time, by drying them gently over the fire; mashing them first.

as a man's finger, in clusters much as the cocoa-nuts do, and they grow forty or fifty in a cluster. This fruit is bigger than a nutmeg, and is much like it but rounder. It is much used all over the East Indies. Their way is to cut it in four pieces, and wrap one of them up in an arek-leaf, which they spread with a soft paste made of lime or plaster, and then chew it altogether. Every man in these parts carries his lime-box by his side, and dipping his finger into it, spreads his betel and arek-leaf with it. The arek is a small tree or shrub, of a green bark, and the leaf is long and broader than a willow. They are packed up to sell into parts that have them not, to chew with the betel. The betel-nut is most esteemed when it is young, and before it grows hard, and then they cut it only in two pieces with the green husk or shell on it. It is then exceeding juicy, and therefore makes them spit much. It tastes rough in the mouth, and dyes the lips red, and makes the teeth black, but it preserves them, and cleanseth the gums. It is also accounted very wholesome for the stomach; but sometimes it will cause great giddiness in the head of those that are not used to chew it. But this is the effect only of the old nut, for the young nuts will not do it. I speak of my own experience.

This island produceth also durians and jacks. The trees that bear the durians are as big as apple-trees, full of boughs. The rind is thick and rough: the fruit is so large that they grow only about the bodies, or on the limbs near the body, like the cacao. The fruit is about the bigness of a large pumpkin, covered with a thick green rough rind. When it is ripe the rind begins to turn yellow, but it is not fit to eat till it opens at the top. Then the fruit in the inside is ripe, and sends forth an excellent scent. When the rind is opened, the fruit may be split into four quarters; each quarter hath several small cells that inclose a certain quantity of the fruit, according to the bigness of the cell, for some are larger than others: the largest of the fruit may be as big as a pullet's egg. It is as white as milk and as soft as cream, and the taste very delicious as those that are accustomed to them; but those who have not been used to eat them will dislike them at first, because they smell liked roasted onions. This fruit must be eaten in its prime, (for there is no eating of it before it is ripe,) and even then it will not keep above a day or two before it putrefies, and turns black or of a dark colour, and then it is not good. Within the fruit there is a stone as big as a small bean, which hath a thin shell over it. Those that are minded to eat the stones or nuts roast them, and then a thin shell comes off, which incloses the nut, and it eats like a chesnut.

The jack or jaca is much like the durian both in bigness and shape. The trees that bear them also are much alike, and so is their manner of the fruits growing; but the inside is different: for the fruit of the durian is white, that of the jack is yellow, and fuller of stones. The durian is most esteemed; yet the jack is a very pleasant fruit, and the stones or kernels are good roasted.

There are many other sorts of grain, roots and fruits in this island, which to give a particular description of would fill up a large volume.

In this island are also many sorts of beasts, both wild and tame; as horses, bulls and cows, buffaloes, goats, wild hogs, deer, monkeys, guanos, lizards, snakes, &c. I never saw or heard of any beasts of prey here, as in many other places. The hogs are ugly creatures; they have all great knobs growing over their eyes, and there are multitudes of them in the woods. They are commonly very poor, yet sweet. Deer are here very plentiful in some places, where they are not disturbed.

Of the venomous kind of creatures here are scorpions, whose sting is in their tail; and centapees, called by the English forty-legs, both which are also common in the West Indies, in Jamaica, and elsewhere. These centapees are four or five inches long,

as big as a goose-quill, but flattish, of a dun or reddish colour on the back, but belly whitish, and full of legs on each side the belly. Their sting or bite is more raging than the scorpion. They lie in old houses and dry timber. There are several sorts of snakes, some very poisonous. There is another sort of creature like a guano both in colour and shape, but four times as big, whose tongue is like a small harpoon, having two beards like the beards of a fish-hook; they are said to be very venomous, but I know not their names. I have seen them in other places also, as at Pulo Condore, or the island Condore, and at Achin, and have been told that they are in the Bay of Bengal.

The fowls of this country are ducks and hens: other tame fowl I have not seen nor heard of any. The wild fowl are pigeons, parrots, parroquets, turtle-doves, and abundance of small fowls. There are bats as big as a kite.

There are a great many harbours, creeks, and good bays for ships to ride in; and rivers navigable for canoes, proes or barks, which are all plentifully stored with fish of divers sorts, so is also the adjacent sea. The chiefest fish are bonetas, snooks, cavallies, bremes, mullets, ten-pounders, &c. Here are also plenty of sea turtle, and small manatee, which are not near so big as those in the West Indies. The biggest that I saw would not weigh above six hundred pound; but the flesh both of the turtle and manatee are very sweet.

The weather at Mindanao is temperate enough as to heat, for all it lies so near the equator, and especially on the borders near the sea. There they commonly enjoy the breezes by day, and cooling land-winds at night. The winds are easterly one part of the year, and westerly the other. The easterly winds begin to blow in October, and it is the middle of November before they are settled. These winds bring fair weather. The westerly winds begin to blow in May, but are not settled till a month afterwards. The west winds always bring rain, tornadoes, and very tempestuous weather. At the first coming on of these winds they blow but faintly, but then the tornadoes rise one in a day, sometimes two: these are thunder showers which commonly come against the wind, bringing with them a contrary wind to what did blow before. After the tornadoes are over, the wind shifts about again, and the sky becomes clear, yet then in the vallies and the sides of the mountains there riseth a thick fog which covers the land. The tornadoes continue thus for a week or more; then they come thicker, two or three in a day, bringing violent gusts of wind and terrible claps of thunder. At last they come so fast, that the wind remains in the quarter from whence these tornadoes do rise, which is out of the west, and there it settles till October or November. When these westward winds are thus settled the sky is all in mourning, being covered with black clouds, pouring down excessive rains, sometimes mixt with thunder and lightning, that nothing can be more dismal. The winds raging to that degree that the biggest trees are torn up by the roots, and the rivers swell and overflow their banks, and drown the low land, carrying great trees into the sea. Thus it continues sometimes a week together before the sun or stars appear. The fiercest of this weather is in the latter end of July and in August, for then the towns seem to stand in a great pond, and they go from one house to another in canoes. At this time the water carries away all the filth and nastiness from under their houses. Whilst this tempestuous season lasts the weather is cold and chilly. In September the weather is more moderate, and the winds are not so fierce, nor the rain so violent. The air thenceforward begins to be more clear and delightful; but then in the morning there are thick fogs, continuing till ten or eleven o'clock before the sun shines out, especially when it has rained in the night. In October the easterly winds begin to blow again, and bring fair weather till April. Thus much concerning the natural state of Mindanao.

CHAP. II.—*Of the Inhabitants, and civil State of the Isle of Mindanao. — The Mindanayans, Hillanoones, Sologues, and Alfoores. — Of the Mindanayans, properly so called; their Manners and Habits. — The Habits and Manners of their Women. — A comical Custom at Mindanao. — Their Houses, their Diet, and Washings. — The Languages spoken there, and Transactions with the Spaniards. — Their Fear of the Dutch, and seeming Desire of the English. — Their Handicrafts, and peculiar Sort of Smith's Bellows. — Their Shipping, Commodities and Trade. — The Mindanao and Manilla Tobacco. — A Sort of Leprosy there, and other Distempers. — Their Marriages. — The Sultan of Mindanao, his Poverty, Power, Family, &c. — The Proes or Boats here. — Raja Laut the General, Brother to the Sultan, and his Family. — Their Way of Fighting. — Their Religion. — Raja Laut's Devotion. — A Clock or Drum in their Mosques. — Of their Circumcision, and the Solemnity then used. — Of other their Religious Observations and Superstitions. — Their Abhorrence of Swine's Flesh, &c.*

THIS island is not subject to one Prince, neither is the language one and the same; but the people are much alike in colour, strength and stature. They are all or most of them of one religion, which is Mahometanism, and their customs and manner of living are alike. The Mindanao people, more particularly so called, are the greatest nation in the island, and trading by sea with other nations they are therefore the more civil. I shall say but little of the rest, being less known to me, but so much as hath come to my knowledge take as follows: there are, besides the Mindanayans the Hilanoones (as they call them), or the Mountaneers, the Sologues and Alfoores.

The Hilanoones live in the heart of the country; they have little or no commerce by sea, yet they have proes that row with twelve or fourteen oars a piece. They enjoy the benefit of the gold mines; and with their gold buy foreign commodities of the Mindanao people. They have also plenty of bees'-wax, which they exchange for other commodities.

The Sologues inhabit the north-west end of the island. They are the least nation of all; they trade to Manila in proes, and to some of the neighbouring islands, but have no commerce with the Mindanao people.

The Alfoores are the same with the Mindanayans, and were formerly under the subjection of the Sultan of Mindanao, but were divided between the Sultan's children, and have of late had a Sultan of their own; but having by marriage contracted an alliance with the Sultan of Mindanao, this has occasioned that Prince to claim them again as his subjects; and he made war with them a little after we went away, as I afterwards understood.

The Mindanayans properly so called, are men of mean statures, small limbs, straight bodies and little heads. Their faces are oval, their foreheads flat, with black small eyes, short low noses, pretty large mouths; their lips thin and red, their teeth black, yet very sound, their hair black and straight, the colour of their skin tawny, but inclining to a brighter yellow than some other Indians, especially the women. They have a custom to wear their thumb-nails very long, especially that on their left thumb, for they do never cut it but scrape it often. They are indued with good natural wits, are ingenious, nimble and active when they are minded, but generally very lazy and thievish, and will not work except forced by hunger. This laziness is natural to most Indians; but these people's laziness seems rather to proceed not so much from their natural inclinations, as from the severity of their Prince, of whom they stand in awe: for he dealing with them very arbitrarily, and taking from them what they get, this  
damps

damps their industry, so they never strive to have any thing but from hand to mouth. They are generally proud and walk very stately. They are civil enough to strangers, and will easily be acquainted with them, and entertain them with great freedom; but they are implacable to their enemies, and very revengeful if they are injured, frequently poisoning secretly those that have affronted them.

They wear but few cloaths; their heads are circled with a short turbat, fringed or laced at both ends; it goes once about the head, and is tied in a knot, the laced ends hanging down. They wear frocks and breeches, but no stockings nor shoes.

The women are fairer than the men; and their hair is black and long, which they tie in a knot, that hangs back in their poles. They are more round visaged than the men, and generally well featured; only their noses are very small, and so low between their eyes, that in some of the female children the rising that should be between the eyes is scarce discernible; neither is there any sensible rising in their foreheads. At a distance they appear very well; but being nigh, these impediments are very obvious. They have very small limbs. They wear but two garments; a frock and a sort of petticoat; the petticoat is only a piece of cloth, sowed both ends together: but it is made two feet too big for their waists, so that they may wear either end uppermost: that part that comes up to their waist, because it is so much too big, they gather it in their hands, and twist it till it fits close to their waists, tucking in the twisted part between their waist and the edge of the petticoat, which keeps it close. The frock fits loose about them, and reaches down a little below the waist. The sleeves are a great deal longer than their arms, and so small at the end, that their hands will scarce go through. Being on the sleeve fits in folds about the wrist, wherein they take great pride.

The better sort of people have their garments made of long cloth; but the ordinary sort wear cloth made of plantain-tree, which they call Saggen, by which name they call the plantain. They have neither stocking nor shoe, and the women have very small feet.

The women are very desirous of the company of strangers, especially of white men: and doubtless would be very familiar, if the custom of the country did not debar them from that freedom, which seems coveted by them. Yet from the highest to the lowest they are allowed liberty to converse with, or treat strangers in the sight of their husbands.

There is a kind of begging custom at Mindanao, that I have not met elsewhere with in all my travels; and which I believe is owing to the little trade they have, which is thus: when strangers arrive here, the Mindanao men will come aboard, and invite them to their houses, and inquire who has a comrade, (which word I believe they have from the Spaniards) or a pagally, and who has not. A comrade is a familiar male friend; a pagally is an innocent platonic friend of the other sex. All strangers are in a manner obliged to accept of this acquaintance and familiarity, which must be first purchased with a small present, and afterwards confirmed with some gift or other to continue the acquaintance: and as often as the stranger goes ashore, he is welcome to his comrade or pagally's house, where he may be entertained for his money to eat, drink, or sleep; and complimented, as often as he comes ashore with tobacco and betel-nut, which is all the entertainment he must expect gratis. The richest men's wives are allowed the freedom to converse with her pagally in public, and may give or receive presents from him. Even the Sultan's and general's wives, who are always coopt up, will yet look out of their cages when a stranger passeth by, and demand of him



him if he wants a pagally : and to invite him to their friendship, will send a present of tobacco and betel-nut to him by their servants.

The chiefest city on this island is called by the same name of Mindanao. It is seated on the south side of the island in latitude seven degrees twenty minutes north on the banks of a small river, about two miles from the sea. The manner of building is somewhat strange, yet generally used in this part of the East Indies. Their houses are all built on posts, about fourteen, sixteen, eighteen, or twenty feet high. These posts are bigger or less, according to the intended magnificence of the superstructure. They have but one floor, but many partitions or rooms, and a ladder or stairs to go up out of the streets. The roof is large and covered with palmeto or palm-leaves. So there is a clear passage like a piazza (but a filthy one) under the house. Some of the poorer people that keep ducks or hens, have a fence made round the posts of their houses, with a door to go in and out ; and this under room serves for no other use. Some use this place for the common draught of their houses, but building mostly close by the river in all parts of the Indies, they make the river receive all the filth of their house ; and at the time of the land-floods, all is washed very clean.

The Sultan's house is much bigger than any of the rest. It stands on about one hundred and eighty great posts or trees, a great deal higher than the common building, with great broad stairs made to go up. In the first room he hath about twenty iron guns, all saker and minion, placed on field-carriages. The general and other great men have some guns also in their houses. About twenty paces from the sultan's house there is a small low house, built purposely for the reception of ambassadors or merchant strangers. This also stands on posts, but the floor is not raised above three or four feet above the ground, and is neatly matted purposely for the sultan and his council to sit on ; for they use no chairs, but sit cross-legged like tailors on the floor.

The common food at Mindanao is rice, or sago, and a small fish or two. The better sort eat buffalo, or fowls ill dressed, and abundance of rice with it. They use no spoons to eat their rice, but every man takes a handful out of the platter, and by wetting his hand in water, that it may not stick to his hand, squeezes into a lump, as hard as possibly he can make it, and then crams it into his mouth. They all strive to make these lumps as big as their mouth can receive them ; and seem to vie with each other, and glory in taking in the biggest lump ; so that sometimes they almost choke themselves. They always wash after meals, or if they touch any thing that is unclean ; for which reason they spend abundance of water in their houses. This water, with the washing of their dishes, and what other filth they make, they pour down near their fire place : for their chambers are not boarded, but floored with split bamboes, like lathe, so that the water presently falls underneath their dwelling rooms, where it breeds maggots, and makes a prodigious stink. Besides this filthiness, the sick people ease themselves, and make water in their chambers ; there being a small hole made purposely in the floor, to let it drop through. But healthy sound people commonly ease themselves and make water in the river. For that reason you shall always see abundance of people of both sexes in the river, from morning till night ; some easing themselves, others washing their bodies or clothes. If they come into the river purposely to wash their clothes, they strip and stand naked till they have done ; then put them on, and march out again : both men and women take great delight in swimming, and washing themselves, being bred to it from their infancy. I do believe it is very wholesome to wash mornings and evenings in these hot countries, at least three or four



days in the week : for I did use myself to it when I lived afterwards at Bencooly, and found it very refreshing and comfortable. It is very good for those that have fluxes to wash and stand in the river mornings and evenings. I speak it experimentally, for I was brought very low with that distemper at Achin ; but by washing constantly mornings and evenings I found great benefit, and was quickly cured by it.

In the city of Mindanao they speak two languages indifferently, their own Mindanao language, and the Malaya : but in other parts of the island they speak only their proper language, having little commerce abroad. They have schools, and instruct their children to read and write, and bring them up in the Mahometan religion. Therefore many of the words, especially their prayers, are in Arabic ; and many of the words of civility the same as in Turkey ; and especially when they meet in the morning, or take leave of each other, they express themselves in that language.

Many of the old people, both men and women, can speak Spanish, for the Spaniards were formerly settled among them, and had several forts on this island ; and then they sent two friars to the city to convert the Sultan of Mindanao and his people. At that time these people began to learn Spanish, and the Spaniards incroached on them, and endeavoured to bring them into subjection ; and probably before this time had brought them all under their yoke, if they themselves had not been drawn off from this island to Manila, to resist the Chinese, who threatened to invade them there. When the Spaniards were gone, the old Sultan of Mindanao, father to the present, in whose time it was, razed and demolished their forts, brought away their guns, and sent away the friars ; and since that time will not suffer the Spaniards to settle on the islands.

They are now most afraid of the Dutch, being sensible how they have enslaved many of the neighbouring islands. For that reason they have a long time desired the English to settle among them, and have offered them any convenient place to build a fort in, as the general himself told us ; giving this reason, that they do not find the English so incroaching as the Dutch or Spanish. The Dutch are no less jealous of their admitting the English, for they are sensible what detriment it would be to them if the English should settle here.

There are but few tradesmen at the city of Mindanao. The chiefest trades are goldsmiths, blacksmiths, and carpenters. There are but two or three goldsmiths ; these will work in gold or silver, and make any thing that you desire : but they have no shop furnished with ware ready made for sale. Here are several blacksmiths who work very well, considering the tools that they work with. Their bellows are much different from ours : they are made of a wooden cylinder, the trunk of a tree, about three feet long, bored hollow like a pump, and set upright on the ground, on which the fire itself is made. Near the lower end there is a small hole, in the side of the trunk next the fire, made to receive a pipe, through which the wind is driven to the fire by a great bunch of fine feathers fastened to one end of the stick, which closing up the inside of the cylinder, drives the air out of the cylinder through the pipe : two of these trunks or cylinders are placed so nigh together, that a man standing between them may work them both at once alternately, one with each hand. They have neither vice nor anvil, but a great hard stone or a piece of an old gun, to hammer upon : yet they will perform their work, making both common utensils and iron-works about ships to admiration. They work altogether with charcoal. Every man almost is a carpenter, for they can work with the axe and adz. Their axe is but small, and so made that they can take it out of the helve, and by turning it make an adz of it. They have no saws ; but when they make plank, they split the tree in

two, and make a plank of each part, planing it with the axe and adz. This requires much pains, and takes up a great deal of time; but they work cheap, and the goodness of the plank thus hewed, which hath its grain preserved entire, makes amends for their cost and pains.

They build good and serviceable ships or barks for the sea, some for trade, others for pleasure; and some ships of war. Their trading vessels they send chiefly to Manila. Thither they transport bees'-wax, which, I think, is the only commodity besides gold that they vend there. The inhabitants of the city of Mindanao get a great deal of bees'-wax themselves: but the greatest quantity they purchase is of the mountaineers, from whom they also get the gold which they send to Manila; and with these they buy their calicoes, muslins, and China silk. They send sometimes their barks to Borneo and other islands; but what they transport thither, or import from thence, I know not. The Dutch come hither in sloops from Ternate and Tidore, and buy rice, bees'-wax, and tobacco: for here is a great deal of tobacco grows on this island, more than in any island or country in the East Indies, that I know of, Manila only excepted. It is an excellent sort of tobacco; but these people have not the art of managing this trade to their best advantage, as the Spaniards have at Manila. I do believe the seeds were first brought hither from Manila by the Spaniards, and even thither, in all probability from America: the difference between the Mindanao and Manila tobacco is, that the Mindanao tobacco is of a darker colour; and the leaf larger and grosser than the Manila tobacco, being propagated or planted in a fatter soil. The Manila tobacco is of a bright yellow colour, of an indifferent size, not strong, but pleasant to smoke. The Spaniards at Manila are very curious about this tobacco, having a peculiar way of making it up neatly in the leaf. For they take two little sticks, each about a foot long, and flat, and placing the stalks of the tobacco leaves in a row, forty or fifty of them between the two sticks, they bind them hard together, so that the leaves hang dangling down; one of these bundles is sold for a rial at Fort St. George: but you may have ten or twelve pounds of tobacco at Mindanao for a rial; and the tobacco is as good, or rather better than the Manila tobacco, but they have not that vent for it as the Spaniards have.

The Mindanao people are much troubled with a sort of leprosy, the same as we observed at Guam. This distemper runs with a dry scurf all over their bodies, and causeth great itching in those that have it, making them frequently scratch and scrub themselves, which raiseth the outer skin in small whitish flakes, like the scales of little fish, when they are raised on end with a knife. This makes their skin extraordinary rough, and in some you shall see broad white spots in several parts of their body. I judge such have had it, but were cured; for their skins were smooth, and I did not perceive them to scrub themselves: yet I have learnt from their own mouths that these spots were from this distemper. Whether they use any means to cure themselves, or whether it goes away of itself, I know not: but I did not perceive that they made any great matter of it, for they did never refrain any company for it; none of our people caught it of them, for we were afraid of it, and kept off. They are sometimes troubled with the small-pox, but their ordinary distempers are fevers, agues, fluxes, with great pains and gripings in their guts. The country affords a great many drugs and medicinal herbs, whose virtues are not unknown to some of them that pretend to cure the sick.

The Mindanao men have many wives: but what ceremonies are used when they marry I know not. There is commonly a great feast made by the bridegroom to entertain his friends, and the most part of the night is spent in mirth.

The

• The Sultan is absolute in his power over all his subjects. He is but a poor Prince; for as I mentioned before, they have but little trade, and therefore cannot be rich. If the sultan understands that any man has money, if it be but twenty dollars, which is a great matter among them, he will send to borrow so much money, pretending urgent occasions for it; and they dare not deny him. Sometimes he will send to sell one thing or another that he hath to dispose of, to such whom he knows to have money, and they must buy it, and give him his price; and if afterwards he hath occasion for the same thing, he must have it if he sends for it. He is but a little man, between fifty or sixty years old, and by relation very good-natured, but over-ruled by those about him. He has a queen, and keeps about twenty-nine women, or wives more, in whose company he spends most of his time. He has one daughter by his sultane or queen, and a great many sons and daughters by the rest. These walk about the streets, and would be always begging things of us; but it is reported, that the young Princess is kept in a room and never stirs out, and that she did never see any man but her father and Raja Laut her uncle, being then about fourteen years old.

When the sultan visits his friends he is carried in a small couch on four men's shoulders, with eight or ten armed men to guard him; but he never goes far this way; for the country is very woody, and they have but little paths, which renders it the less commodious. When he takes his pleasure by water, he carries some of his wives along with him. The proes that are built for this purpose, are large enough to entertain fifty or sixty persons or more. The hull is neatly built, with a round head and stern, and over the hull there is a small slight house built with bamboos; the sides are made up with split bamboos, about four feet high, with little windows in them of the same, to open and shut at their pleasure. The roof is almost flat, nearly thatched with palmeto leaves. This house is divided into two or three small partitions or chambers, one particularly for himself. This is neatly matted underneath and round the sides, and there is a carpet and pillows for him to sleep on. The second room is for his women, much like the former. The third is for the servants, who tend them with tobacco and betel-nut; for they are always chewing or smoking. The fore and afterparts of the vessel are for the mariners to sit and row. Besides this, they have outlayers, such as those I described at Guam; only the boats and outlayers here are larger. These boats are more round, like a half-moon almost; and the bamboos or outlayers that reach from the boat are also crooked. Besides, the boat is not flat on one side here, as at Guam; but hath a belly and outlayers on each side: and whereas at Guam there is a little boat fastened to the outlayers, that lies in the water; the beams or bamboos here are fastened transversely to the outlayers on each side, and touch not the water like boats, but one, three, or four feet above the water, and serve for the barge-men to sit and row and paddle on; the inside of the vessel, except only just afore and abaft, being taken up with the apartments for the passengers. There run across the outlayers two tier of beams for the paddlers to sit on, on each side the vessel. The lower tier of these beams is not above a foot from the water; so that upon any the least reeling of the vessel, the beams are dipped into the water, and the men that sit are wet up to their waste; their feet seldom escaping the water. And thus, as all our vessels are rowed from within, these are paddled from without.

The sultan hath a brother called Raja Laut, a brave man. He is the second man in the kingdom. All strangers that come hither to trade must make their address to him, for all sea-affairs belong to him. He licenseth strangers to import or export any commodity, and 'tis by his permission that the natives themselves are suffered to trade: nay,

the very fishermen must take a permit from him ; so that there is no man can come into the river or go out of it but by his leave. He is two or three years younger than the sultan, and a little man like him. He has eight women, by some of whom he hath issue. He hath only one son, about twelve or fourteen years old, who was circumcised while we were there. His eldest son died a little before we came hither, for whom he was still in great heaviness. If he had lived a little longer he should have married the young princess ; but whether this second son must have her I know not, for I did never hear any discourse about it. Raja Laut is a very sharp man : he speaks and writes Spanish, which he learned in his youth. He has, by often conversing with strangers, got a great sight into the customs of other nations, and by Spanish books has some knowledge of Europe. He is general of the Mindanayans, and is accounted an expert soldier, and a very stout man ; and the women in their dances, sing many songs in his praise.

The sultan of Mindanao sometimes makes war with his neighbours the mountaineers, or Alfoores. Their weapons are swords, lances, and some hand-creffets. The creffet is a small thing like a bayonet, which they always wear in war or peace, at work or play, from the greatest of them to the poorest, or the meanest persons. They do never meet each other so as to have a pitched battle, but they build small works or forts of timber, wherein they plant little guns, and lie in sight of each other two or three months skirmishing every day in small parties, and sometimes surprising a breast-work ; and whatever side is like to be worsted, if they have no probability to escape by flight, they sell their lives as dear as they can ; for there is seldom any quarter given, but the conqueror cuts and hacks his enemies to pieces.

The religion of these people is Mahometanism. Friday is their sabbath : but I did never see any difference that they make between this day and any other day ; only the sultan himself goes then to the mosque twice. Raja Laut never goes to the mosque, but prays at certain hours, eight or ten times in a day ; wherever he is, he is very punctual to his canonical hours, and if he be aboard will go ashore, on purpose to pray ; for no business nor company hinders him from this duty. Whether he is at home or abroad, in a house or in the field, he leaves all his company, and goes about one hundred yards off, and there kneels down to his devotion. He first kisses the ground, then prays aloud, and divers times in his prayers he kisses the ground, and does the same when he leaves off. His servants and his wives and children talk and sing, or play how they please all the time, but himself is very serious. The meaner sort of people have little devotion ; I did never see any of them at their prayers, or go into a mosque.

In the sultan's mosque there is a great drum, with but one head, called a gong ; which is instead of a clock. This gong is beaten at twelve o'clock, at three, six, and nine ; a man being appointed for that service. He has a stick as big as a man's arm, with a great knob at the end, bigger than a man's fist, made with cotton, bound fast with small cords : with this he strikes the gong as hard as he can, about twenty strokes ; beginning to strike leisurely the first five or six strokes, then he strikes faster, and at last strikes as fast as he can ; and then he strikes again slower and slower so many more strokes : thus he rises and falls three times, and then leaves off till three hours after. This is done night and day.

They circumcise the males at eleven or twelve years of age, or older ; and many are circumcised at once. This ceremony is performed with a great deal of solemnity. There had been no circumcision for some years before our being here ; and then there was one for Raja Laut's son. They choose to have a general circumcision when the

Sultan

Sultan or general, or some other great person hath a son fit to be circumcised; for with him a great many more are circumcised. There is notice given, about eight or ten days before, for all men to appear in arms; and great preparation is made against the solemn day. In the morning, before the boys are circumcised, presents are sent to the father of the child that keeps the feast, which, as I said before, is either the sultan or some great person; and about ten or eleven o'clock the Mahometan priest does his office. He takes hold of the foreskin with two sticks, and with a pair of scissars snips it off. After this most of the men, both in city and country being in arms before the house, begin to act as if they were engaged with an enemy, having such arms as I described. Only one acts at a time; the rest make a great ring of two or three hundred yards round about him. He that is to exercise comes into the ring with a great shriek or two, and a horrid look; then he fetches two or three large stately strides and falls to work. He holds his broad-sword in one hand, and his lance in the other, and traverses his ground, leaping from one side of the ring to the other; and, in a menacing posture and look, bids defiance to the enemy whom his fancy frames to him; for there is nothing but air to oppose him. Then he stamps and shakes his head, and grinning with his teeth makes many rueful faces. Then he throws his lance, and nimbly snatches out his crescent, with which he hacks and hews the air like a mad-man, often shrieking. At last being almost tired with motion, he flies to the middle of the ring, where he seems to have his enemy at his mercy, and with two or three blows cuts on the ground as if he was cutting off his enemy's head. By this time he is all of a sweat, and withdraws triumphantly out of the ring, and presently another enters with the like shrieks and gestures. Thus they continue combating their imaginary enemy all the rest of the day; towards the conclusion of which the richest men act, and at last the general, and then the sultan concludes this ceremony: he and the general, with some other great men, are in armour, but the rest have none. After this the sultan returns home, accompanied with abundance of people, who wait on him there till they are dismissed. But at the time when we were there, there was an after-game to be played; for the general's son being then circumcised, the sultan intended to give him a second visit in the night, so they all waited to attend him thither. The general also provided to meet him in the best manner, and therefore desired Captain Swan with his men to attend him. Accordingly Captain Swan ordered us to get our guns and wait at the general's house till further orders. So about forty of us waited till eight o'clock in the evening; when the general with Captain Swan, and about one thousand men, went to meet the sultan, with abundance of torches that made it as light as day. The manner of the march was thus: first of all there was a pageant, and upon it two dancing women gorgeously apparelled, with coronets on their heads, full of glittering spangles, and pendants of the same, hanging down over their breast and shoulders. These are women bred up purposely for dancing: their feet and legs are but little employed, except sometimes to turn round very gently; but their hands, arms, head, and body, are in continual motion, especially their arms, which they turn and twist so strangely, that you would think them to be made without bones. Besides the two dancing women, there were two old women in the pageant holding each a lighted torch in their hands, close by the two dancing women, by which light the glittering spangles appeared very gloriously. This pageant was carried by six lusty men: then came six or seven torches, lighting the general and Captain Swan, who marched side by side next, and we that attended Captain Swan followed close after, marching in order six and six abreast, with each man his gun on his shoulder,

and torches on each side. After us came twelve of the general's men, with old Spanish matchlocks, marching four in a row. After them about forty lances, and behind them as many with great swords, marching all in order. After them came abundance only with creffets by their sides, who marched up close without any order. When we came near the sultan's house, the sultan and his men met us, and we wheeled off to let them pass. The sultan had three pageants went before him: in the first pageant were four of his sons, who were about ten or eleven years old; they had gotten abundance of small stones, which they roguishly threw about on the people's heads: in the next were four young maidens, nieces to the sultan, being his sister's daughters; and in the third, there was three of the sultan's children, not above six years old. The sultan himself followed next, being carried in his couch, which was not like your Indian palankin, but open, and very little and ordinary. A multitude of people came after, without any order: but as soon as he was past by, the general and Captain Swan, and all our men, closed in just behind the sultan, and so all marched together to the general's house. We came thither between ten and eleven o'clock, where the greatest part of the company were immediately dismissed; but the sultan and his children, and his nieces, and some other persons of quality, entered the general's house. They were met at the head of the stairs by the general's women, who with a great deal of respect conducted them into the house. Captain Swan, and we that were with him, followed after. It was not long before the general caused his dancing-women to enter the room and divert the company with that pastime. I had forgot to tell you that they have none but vocal music here, by what I could learn, except only a row of a kind of bells without clappers, sixteen in number, and their weight increasing gradually from about three to ten pound weight. These are set in a row on a table in the general's house, where for seven or eight days together before the circumcision day, they were struck each with a little stick for the biggest part of the day, making a great noise, and they ceased that morning. So these dancing-women sung themselves, and danced to their own music. After this the general's women, and the sultan's sons, and his nieces, danced. Two of the sultan's nieces were about eighteen or nineteen years old, the other two were three or four years younger. These young ladies were very richly dressed, with loose garments of silk, and small coronets on their heads. They were much fairer than any women I did ever see there, and very well featured; and their noses, though but small, yet higher than the other women's, and very well proportioned. When the ladies had very well diverted themselves and the company with dancing, the general caused us to fire some sky-rockets, that were made by his and Captain Swan's order purposely for this night's solemnity; and after that the sultan and his retinue went away, with a few attendants, and we all broke up: and thus ended this day's solemnity. But the boys, being fore with their amputation, went straddling for a fortnight after.

They are not, as I said before, very curious, or strict in observing any days, or times of particular devotions, except it be Ramdam time, as we call it. The Ramdam time was then in August, as I take it, for it was shortly after our arrival here. In this time they fast all day, and about seven o'clock in the evening they spend near an hour in prayer. Towards the latter end of their prayer they loudly invoke their prophet for about a quarter of an hour, both old and young bawling out very strangely, as if they intended to fright him out of his sleepiness or neglect of them. After their prayer is ended, they spend some time in feasting before they take their repose. Thus they do every day for a whole month at least; for sometimes it is two or three days longer before

before the Ramdam ends: for it begins at the new moon, and lasts till they see the next new moon, which sometimes in thick hazy weather is not till three or four days after the change, as it happened while I was at Achin, where they continued the Ramdam till the new moon's appearance. The next day after they have seen the new moon, the guns are all discharged about noon, and then the time ends.

A main part of their religion consists in washing often, to keep themselves from being defiled; or after they are defiled to cleanse themselves again. They also take great care to keep themselves from being polluted, by tasting or touching any thing that is accounted unclean; therefore swine's flesh is very abominable to them; nay, any one that hath either tasted of swine's flesh, or touched those creatures, is not permitted to come into their houses in many days after, and there is nothing will scare them more than a swine. Yet there are wild hogs in the islands, and those so plentiful, that they will come in troops out of the woods in the night into the very city, and come under their houses to rummage up and down the filth that they find there. The natives therefore would even desire us to lie in wait for the hogs to destroy them, which we did frequently, by shooting them and carrying them presently on board, but were prohibited their houses afterwards.

And now I am on this subject, I cannot omit a story concerning the general. He once desired to have a pair of shoes made after the English fashion, though he did very seldom wear any; so one of our men made him a pair, which the general liked very well. Afterwards some body told him, that the thread wherewith the shoes were sewed were pointed with hog's bristles. This put him into a great passion; so he sent the shoes to the man that made them, and sent him withal more leather to make another pair, with threads pointed with some other hair, which was immediately done, and then he was well pleased.

CHAP. III. — *Their coasting along the Isle of Mindanao, from a Bay on the East Side to another at the South-east End. — Tornados and boisterous Weather. — The South-east Coast, and its Savannah and Plenty of Deer. — They coast along the South Side to the River of Mindanao City, and anchor there. — The Sultan's Brother and Son come aboard, and invite them to settle there. — Of the Feasibleness and probable Advantage of such a Settlement from the neighbouring Gold and Spice Islands. — Of the best Way to Mindanao by the South Sea and Terra Australis; and of an accidental Discovery there by Captain Davis, and a Probability of a greater. — The Capacity they were in to settle here. — The Mindanayans measure their Ship. — Captain Swan's Present to the Sultan: his Reception of it, and Audience given to Captain Swan, with Raja Laut, the Sultan's Brother's Entertainment of him. — The Contents of two English Letters shewen them by the Sultan of Mindanao. — Of the Commodities, and the Punishments there. — The General's Caution how to demean themselves; at his Persuasion they lay up their Ships in the River. — The Mandanayans' Caresses. — The great Rains and Floods of the City. — The Mandanayans have Chinese Accountants. — How their Women dance. — A Story of one John Thacker. — Their Bark eaten up, and their Ship endangered by the Worm. — Of the Worms here and elsewhere. — Of Captain Swan. — Raja Laut, the General's Deceitfulness. — Hunting wild Kine. — The Prodigality of some of the English. — Captain Swan treats with a young Indian of a Spice-Island. — A Hunting Voyage with the General. — His punishing a Servant of his. — Of his Wives and Women. — A Sort of strong Rice-Drink. — The General's foul Dealing and Exactions. — Captain Swan's Uneasiness and indiscreet Management. — His Men mutiny. — Of a Snake twisting*



*about one of their Necks. — The main Part of the Crew go away with the Ship, leaving Captain Swan and some of his Men: several others poisoned there.*

HAVING in the two last chapters given some account of the natural, civil, and religious state of Mindanao, I shall now go on with the prosecution of our affairs during our stay there.

It was in a bay on the north-east side of the island that we came to an anchor, as hath been said. We lay in this bay but one night, and part of the next day. Yet there we got speech with some of the natives, who by signs made us to understand, that the city of Mindanao was on the west side of the island. We endeavoured to persuade one of them to go with us to be our pilot, but he would not: therefore in the afternoon we loosed from hence, steering again to the south-east, having the wind at south-west. When we came to the south-east end of the island Mindanao, we saw two small islands about three leagues distant from it. We might have passed between them and the main island, as we learnt since; but not knowing them, nor what dangers we might encounter there, we chose rather to sail to the eastward of them; but meeting very strong westerly winds we got nothing forward in many days. In this time we first saw the islands Meangis, which are about sixteen leagues distant from the Mindanao, bearing south-east. I shall have occasion to speak more of them hereafter.

The 4th day of July we got into a deep bay, four leagues north-west from the two small islands before mentioned. But the night before, in a violent tornado, our bark being unable to bear any longer, bore away, which put us in some pain for fear she was overfet, as we had like to have been ourselves. We anchored on the south-west side of the bay, in fifteen fathoms water, about a cable's length from shore. Here we were forced to shelter ourselves from the violence of the weather, which was so boisterous with rains and tornados and a strong westerly wind, that we were very glad to find this place to anchor in, being the only shelter on this side from the west winds.

This bay is not above two miles wide at the mouth, but farther in it is three leagues wide, and seven fathoms deep, running north-north-west. There is a good depth of water about four or five leagues in, but rocky foul ground for about two leagues in from the mouth on both sides of the bay, except only in that place where we lay. About three leagues in from the mouth, on the eastern side, there are fair sandy bays, and very good anchoring in four, five and six fathoms. The land on the east side is high, mountainous and woody, yet very well watered with small brooks, and there is one river large enough for canoes to enter. On the west side of the bay the land is of a mean height with a large savannah bordering on the sea, and stretching from the mouth of the bay a great way to the westward.

This savannah abounds with long grass, and it is plentifully stocked with deer. The adjacent woods are a covert for them in the heat of the day; but mornings and evenings they feed in the open plains as thick as in our parks in England. I never saw any where such plenty of wild deer, though I have met with them in several parts of America, both in the north and south seas.

The deer live here pretty peaceably and unmolested, for there are no inhabitants on that side of the bay. We visited this savannah every morning, and killed as many deer as we pleased, sometimes sixteen or eighteen in a day; and we did eat nothing but venison all the time we stayed there.

We saw a great many plantations by the sides of the mountains, on the east side of the bay, and we went to one of them, in hopes to learn of the inhabitants whereabouts the city was, that we might not over-sail in the night, but they fled from us.



We lay here till the twelfth day before the winds abated of their fury, and then we sailed from hence, directing our course to the westward. In the morning we had a land-wind at north. At eleven o'clock the sea breeze came at west just in our teeth, but it being fair weather we kept on our way, turning and taking the advantage of the land-breezes by night and the sea-breezes by day.

Being now past the south-east part of the island we coasted down on the south side, and we saw abundance of canoes a fishing, and now and then a small village. Neither were these inhabitants afraid of us, as the former, but came aboard; yet we could not understand them nor they us but by signs: and when we mentioned the word Mindanao they would point towards it.

The 18th day of July we arrived before the river of Mindanao, the mouth of which lies in latitude 6 degrees 22 minutes north, and is laid in 231 degrees 12 minutes longitude west, from the Lizard in England. We anchored right against the river in fifteen fathom water, clear hard sand; about two miles from the shore, and three or four miles from a small island that lay without us to the southward. We fired seven or nine guns, I remember not well which, and were answered again with three from the shore, for which we gave one again. Immediately after our coming to an anchor, Raja Laut and one of the Sultan's sons came off in a canoe, being rowed with ten oars, and demanded in Spanish what we were, and from whence we came? Mr. Smith (he who was taken prisoner at Leon in Mexico) answered in the same language that we were English, and that we had been a great while out of England. They told us that we were welcome, and asked us a great many questions about England; especially concerning our East India merchants, and whether we were sent by them to settle a factory here? Mr. Smith told them that we came hither only to buy provision. They seemed a little discontented when they understood that we were not come to settle among them; for they had heard of our arrival on the east side of the island a great while before, and entertained hopes that we were sent purposely out of England hither to settle a trade with them, which it should seem they are very desirous of: for Captain Goodlud had been here not long before to treat with them about it; and when he went away told them, as they said, that in short time they might expect an ambassador from England to make a full bargain with them.

Indeed, upon mature thoughts, I should think we could not have done better than to have complied with the desire they seemed to have of our settling here; and to have taken up our quarters among them. For as thereby we might better have consulted our own profit and satisfaction, than by the other loose roving way of life; so it might probably have proved of public benefit to our nation, and been a means of introducing an English settlement and trade, not only here, but through several of the spice-islands which lie in its neighbourhood.

For the islands Meangis, which I mentioned in the beginning of this chapter, lie within twenty leagues of Mindanao. These are three small islands that abound with gold and cloves, if I may credit my author, Prince Jeoly, who was born on one of them, and was at that time a slave in the city of Mindanao. He might have been purchased by us of his master for a small matter (as he was afterwards by Mr. Moody, who came hither to trade, and laded a ship with clove-bark), and by transporting him home to his own country, we might have gotten a trade there. But of Prince Jeoly I shall speak more hereafter. These islands are as yet probably unknown to the Dutch, who, as I said before, endeavour to engross all the spice into their own hands.

There was another opportunity offered us here of settling on another spice-island that was very well inhabited: for the inhabitants fearing the Dutch, and understanding that the English were settling at Mindanao, their Sultan sent his nephew to Mindanao

nao while we were there to invite us thither. Captain Swan conferred with him about it divers times, and I do believe he had some inclination to accept the offer, and I am sure most of the men were for it; but this never came to a head, for want of a true understanding between Captain Swan and his men, as may be declared hereafter.

Beside the benefit which might accrue from this trade with Meangis, and other the spice-islands, the Philippine islands themselves, by a little care and industry, might have afforded us a very beneficial trade, and all these trades might have been managed from Mindanao, by settling there first. For that island lieth very convenient for trading either to the spice-islands, or to the rest of the Philippine islands; since as its soil is much of the same nature with either of them, so it lies as it were in the centre of the gold and spice trade in these parts; the islands north of Mindanao abounding most in gold, and those south of Meangis in spice.

As the island Mindanao lies very convenient for trade so considering its distance, the way thither may not be over long and tiresome. The course that I would choose should be to set out of England about the latter end of August, and to pass round Terra del Fuego, and so stretching over towards new Holland, coast it along that shore till I came near to Mindanao; or first I would coast down near the American shore, as far as I found convenient, and then direct my course accordingly for the island. By this I should avoid coming near any of the Dutch settlements, and be sure to meet always with a constant brisk easterly trade-wind, after I was once past Terra del Fuego. Whereas in passing about the Cape of Good Hope, after you are shot over the East Indian ocean and are to come to the islands, you must pass through the Streights of Malacca or Sandy, or else some other streights east from Java, where you will be sure to meet with contrary winds, go on which side of the equator you please; and this would require ordinarily seven or eight months for the voyage, but the other I should hope to perform in six or seven at most. In your return from thence also you must observe the same rule as the Spaniards do in going from Manila to Acapulco; only as they run towards the north pole for variable winds, so you must run to the southward, till you meet with a wind that will carry you over to Terra del Fuego. There are places enough to touch at for refreshment, either going or coming. You may touch going thither on either side of Terra Patagonia, or, if you please, at the Gallapagos Islands, where there is refreshment enough; and returning you may probably touch somewhere on New Holland, and so make some profitable discovery in these places without going out of your way. And to speak my thoughts freely, I believe it is owing to the neglect of this easy way that all that vast tract of Terra Australis which bounds the South Sea is yet undiscovered: those that cross that sea seeming to design some business on the Peruvian or Mexican coast, and so leaving that at a distance. To confirm which, I shall add what Captain Davis told me lately, that after his departure from us at the haven of Ria Lexa, (as is mentioned in the eighth chapter,) he went after several traverses to the Gallapagos, and that standing thence southward for wind, to bring him about Terra del Fuego, in the latitude of twenty-seven south, about five-hundred leagues from Copayapo, on the coast of Chili, he saw a small sandy island just by him; and that they saw to the westward of it a long tract of pretty high land, tending away towards the north-west out of sight. This might probably be the coast of Terra Australis Incognita.

But to return to Mindanao: as to the capacity we were then in, of settling ourselves at Mindanao, although we were not sent out of any such design of settling, yet we were as well provided or better, considering all circumstances, than if we had. For there was scarce any useful trade but some or other of us understood it. We had lawyers, carpenters, joiners, brickmakers, bricklayers, shoemakers, tailors, &c.

we only wanted a good smith for great work ; which we might have had at Mindanao. We were very well provided with iron, lead, and all sorts of tools, as saws, axes, hammers, &c. We had powder and shot enough, and very good small arms. If we had designed to build a fort, we could have spared eight or ten guns out of our ship, and men enough to have managed it, and any affair of trade beside. We had also a great advantage above raw men that are sent out of England into these places, who proceed usually too cautiously, coldly and formally, to compass any considerable design, which experience better teaches than any rules whatsoever ; besides the danger of their lives in so great and sudden a change of air : whereas we were all inured to hot climates, hardened by many fatigues, and in general daring men, and such as would not be easily baffled. To add one thing more, our men were almost tired, and began to desire a *quietus est* ; and therefore they would gladly have seated themselves any where. We had a good ship too, and enough of us (beside what might have been spared to manage our new settlement) to bring the news with the effects to the owners in England : for Captain Swan had already five thousand pounds in gold, which he and his merchants received for goods sold mostly to Captain Harris and his men : which if he had laid but part of it out in spice, as probably he might have done, would have satisfied the merchants to their hearts' content. So much by way of digression.

To proceed therefore with our first reception at Mindanao ; Raja Laut and his nephew sat still in their canoa, and would not come aboard us ; because as they said, they had no orders from the Sultan. After about half an hour's discourse they took their leaves ; first inviting Captain Swan ashore, and promising to assist him in getting provision ; which they said at present was scarce, but in three or four months' time the rice would be gathered in, and then he might have as much as he pleased : and that in the mean time he might secure his ship in some convenient place, for fear of the westerly winds, which they said would be very violent at the latter end of this month, and all the next, as we found them.

We did not know the quality of these two persons till after they were gone ; else we should have fired some guns at their departure : when they were gone a certain officer under the Sultan came aboard and measured our ship. A custom derived from the Chinese, who always measure the length and breadth, and the depth of the hold of all ships that come to load there : by which means they know how much each ship will carry. But for what reason this custom is used either by the Chinese, or Mindanao men, I could never learn ; unless the Mindanayans design by this means to improve their skill in shipping, against they have a trade.

Captain Swan considering that the season of the year would oblige us to spend some time at this island, thought it convenient to make what interest he could with the Sultan ; who might afterwards either obstruct or advance his designs. He therefore immediately provided a present to send ashore to the Sultan, viz. three yards of scarlet cloth, three yards of broad gold lace, a turkish scimitar and a pair of pistols : and to Raja Laut he sent three yards of scarlet cloth, and three yards of silver lace. This present was carried by Mr. Henry More in the evening. He was first conducted to Raja Laut's house ; where he remained till report thereof was made to the Sultan, who immediately gave order for all things to be made ready to receive him.

About nine o'clock at night, a messenger came from the Sultan to bring the present away. Then Mr. More was conducted all the way with torches and armed men, till he came to the house where the Sultan was. The Sultan with eight or ten men of his council were seated on carpets, waiting his coming. The present that

that Mr. More brought was laid down before them, and was very kindly accepted by the Sultan, who caused Mr. More to sit down by them, and asked a great many questions of him. The discourse was in Spanish by an interpreter. This conference lasted about an hour, and then he was dismissed, and returned again to Raja Laut's house. There was a supper provided for him, and the boat's crew; after which he returned aboard.

The next day the Sultan sent for Captain Swan; he immediately went on shore with a flag flying in the boat's head, and two trumpets sounding all the way. When he came ashore, he was met at his landing by two principal officers, guarded along with soldiers and abundance of people gazing to see him. The Sultan waited for him in his chamber of audience, where Captain Swan was treated with tobacco and betel, which was all his entertainment.

The Sultan sent for two English letters for Captain Swan to read, purposely to let him know, that our East India merchants did design to settle here, and that they had already sent a ship hither. One of these letters was sent to the Sultan from England, by the East India merchants. The chiefest things contained in it, as I remember, for I saw it afterwards in the secretary's hand, who was very proud to shew it to us, was to desire some privileges, in order to the building of a fort there. This letter was written in a very fair hand; and between each line there was a gold line drawn. The other letter was left by Captain Goodlud, directed to any Englishmen who should happen to come thither. This related wholly to trade, giving an account at what rate he had agreed with them for goods of the island, and how European goods should be sold to them, with an account of their weights and measures, and their difference from ours.

The rate agreed on for Mindanao gold was fourteen Spanish dollars, (which is a current coin all over India) the English ounce, and eighteen dollars the Mindanao ounce. But for bee's-wax and clove-bark, I do not remember the rates, neither do I well remember the rates of Europe commodities; but I think the rate of iron was not above four dollars a hundred. Captain Goodlud's letter concludes thus: "Truth none of them, for they are all thieves, but tace is Latin for a candle." We understood afterwards that Captain Goodlud was robbed of some goods by one of the general's men, and that he that robbed him was fled into the mountains, and could not be found while Captain Goodlud was here. But the fellow returning back to the city some time after our arrival here, Raja Laut brought him bound to Captain Swan, and told him what he had done, desiring him to punish him for it as he pleased: but Captain Swan excused himself, and said it did not belong to him, therefore he would have nothing to do with it. However, the general Raja Laut would not pardon him, but punished him according to their own custom, which I did never see but at this time.

He was stript stark naked in the morning at sun rising, and bound to a post, so that he could not stir hand nor foot, but as he was moved; and was placed with his face eastward against the sun. In the afternoon they turned his face towards the west, that the sun might still be in his face; and thus he stood all day, parched in the sun (which shines here excessively hot) and tormented with the moskitos or gnats: after this the general would have killed him, if Captain Swan had consented to it. I did never see any put to death: but I believe they are barbarous enough in it. The general told us himself that he put two men to death in a town where some of us were with him; but I heard not the manner of it. Their common way of punishing is to strip them in this manner, and place them in the sun; but sometimes they lay

them flat on their backs on the sand, which is very hot ; where they remain a whole day in the scorching sun, with the moskitoes biting them all the time.

This action of the general in offering Captain Swan the punishment of the thief, caused Captain Swan afterwards to make him the same offer of his men, when any had offended the Mindanao men : but the general left such offenders to be punished by Captain Swan, as he thought convenient. So that for the least offence Captain Swan punished his men, and that in the sight of the Mindanaians ; and I think sometimes only for revenge ; as he did once punish his chief mate Mr. Teat, he that came Captain of the bark to Mindanao. Indeed at that time Captain Swan had his men as much under command as if he had been in a King's ship : and had he known how to use his authority, he might have led them to any settlement, and have brought them to assist him in any design he had pleased.

Captain Swan being dismissed from the Sultan, with abundance of civility, after about two hours discourse with him, went thence to Raja Laut's house. Raja Laut had then some difference with the Sultan, and therefore he was not present at the Sultan's reception of our captain ; but waited his return, and treated him and all his men with boiled rice and fowls. He then told Captain Swan again, and urged it to him, that it would be best to get his ship into the river as soon as he could, because of the usual tempestuous weather of this time of the year ; and that he should want no assistance to further him in any thing. He told him also, that as we must of necessity stay here some time, so our men would often come ashore ; and he therefore desired him to warn his men to be careful to give no affront to the natives ; who he said, were very revengeful. That their customs being different from ours, he feared that Captain Swan's men might some time or other offend them, though ignorantly ; that therefore he gave him this friendly warning to prevent it : that his house should always be open to receive him or any of his men, and that he, knowing our customs, would never be offended at any thing. After a great deal of such discourse he dismissed the captain and his company, who took their leave and came aboard.

Captain Swan having seen the two letters, did not doubt but that the English did design to settle a factory here : therefore he did not much scruple the honesty of these people, but immediately ordered us to get the ship into the river. The river upon which the city of Mindanao stands is but small, and hath not above ten or eleven foot water on the bar at a spring tide. Therefore we lightened our ship, and the spring coming on, we with much ado got her into the river, being assisted by fifty or sixty Mindanaian fishermen, who lived at the mouth of the river ; Raja Laut himself being aboard our ship to direct them. We carried her about a quarter of a mile up, within the mouth of the river, and there moored her, head and stern in a hole, where we always rode afloat. After this the citizens of Mindanao came frequently aboard to invite our men to their houses, and to offer us pagallies. It was a long time since any of us had received such friendship, and therefore we were the more easily drawn to accept of their kindneses ; and in a very short time most of our men got a comrade or two, and as many pagallies ; especially such of us as had good clothes, and store of gold, as many had, who were of the number of those that accompanied Captain Harris over the Isthmus of Darien, the rest of us being poor enough. Nay, the very poorest and meanest of us could hardly pass the streets, but we were even hauled by force into their houses, to be treated by them : although their treats were but mean, viz. tobacco, or betel-nut, or a little sweet spiced water ; yet their seeming sincerity, simplicity, and the manner of bestowing these gifts, made them very acceptable.

When we came to their houses, they would always be praising the English, as declaring that the English and Mindanaians were all one. This they express by putting their two fore-fingers close together, and saying that the English and Mindanaians were "famo, famo" that is, all one. Then they would draw their fore-fingers half a foot asunder, and say the Dutch and they were Bugeto, which signifies so, that they were at such a distance in point of friendship: and for the Spaniards, they would make a greater representation of distance than for the Dutch: fearing these, but having felt, and smarted from the Spaniards, who had once almost brought them under.

Captain Swan did seldom go into any house at first, but into Raja Laut's. There he dined commonly every day; and as many of his men as were ashore, and had no money to entertain themselves, resorted thither about twelve o'clock, where they had rice enough boiled and well-drest, and some scraps of fowls, or bits of buffaloe, drest very nastily. Captain Swan was served a little better, and his two trumpeters sounded all the time that he was at dinner. After dinner Raja Laut would sit and discourse with him most part of the afternoon. It was now the Ramdam time, therefore the general excused himself, that he could not entertain our captain with dances, and other pastimes, as he intended to do when this solemn time was past; besides, it was the very height of the wet season, and therefore not so proper for pastimes.

We had now very tempestuous weather, and excessive rains, which so swelled the river, that it overflowed its banks; so that we had much ado to keep our ship safe: for every now and then we should have a great tree come floating down the river and sometimes lodge against our bows, to the endangering the breaking our cables, and either the driving us in, over the banks, or carrying us out to sea; both which would have been very dangerous to us, especially being without ballast.

The city is about a mile long, of no great breadth, winding with the banks of the river on the right hand going up, though it hath many houses on the other side too. But at this time it seemed to stand as in a pond, and there was no passing from one house to another but in canoes. This tempestuous rainy weather happened the latter end of July, and lasted most part of August.

When the bad weather was a little assuaged, Captain Swan hired a house to put our sails and goods in, while we careened our ship. We had a great deal of iron and lead, which was brought ashore into this house. Of these commodities Captain Swan sold to the sultan or general, eight or ten tuns, at the rates agreed on by Captain Goodlud, to be paid in rice. The Mindanaians are no good accountants; therefore the Chinese that live here do cast up their accounts for them. After this, Captain Swan bought timber trees of the general, and set some of our men to saw them into planks, to sheath the ship's bottom. He had two whip-saws on board, which he brought out of England, and four or five men that knew the use of them, for they had been sawyers in Jamaica.

When the Ramdam time was over, and the dry time set in a little, the general to oblige Captain Swan, entertained him every night with dances. The dancing women that are purposely bred up to it, and make it their trade, I have already described. But beside them all the women in general are much addicted to dancing. They dance forty or fifty at once; and that standing all round in a ring, joined hand in hand, and singing and keeping time. But they never budge out of their places, nor make any motion till the chorus is sung; then all at once they throw out one leg, and bawl out aloud; and sometimes they only clap their hands when the chorus is sung. Captain Swan to retaliate the general's favours sent for his violins, and some that could dance

dance English dances; wherewith the general was well very pleased. They commonly spent the biggest part of the night in these sort of pastimes.

Among the rest of our men that did use to dance thus before the general, there was one John Thacker, who was a seaman bred, and could neither write nor read; but had formerly learnt to dance in the music-houses about Wapping: this man came into the South-seas with Captain Harris, and getting with him a good quantity of gold, and being a pretty good husband of his share, had still some left, besides what he laid out in a very good suit of cloaths. The general supposed by his garb and his dancing, that he had been of noble extraction; and to be satisfied of his quality, asked of one of our men, if he did not guess aright of him? The man of whom the general asked this question told him he was much in the right; and that most of our ship's company were of the like extraction, especially all those that had fine cloaths; and that they came aboard only to see the world, having money enough to bear their expences wherever they came; but that for the rest, those that had but mean cloaths, they were only common seamen. After this, the general shewed a great deal of respect to all that had good cloaths, but especially to John Thacker, till Captain Swan came to know the business, and marred all; undeceiving the general, and drubbing the nobleman: for he was so much incensed against John Thacker, that he could never endure him afterwards, though the poor fellow knew nothing of the matter.

About the middle of November we began to work on our ship's bottom, which we found very much eaten with the worm: for this is a horrid place for worms. We did not know this till after we had been in the river a month; and then we found our canoes bottoms eaten like honey-combs; our bark, which was a single bottom, was eaten through; so that she could not swim. But our ship was sheathed, and the worm came no further than the hair between the sheathing plank, and the main plank. We did not mistrust the general's knavery till now: for when he came down to our ship, and found us ripping off the sheathing plank, and saw the firm bottom underneath, he shook his head, and seemed to be discontented; saying, he did never see a ship with two bottoms before. We were told that in this place, where we now lay, a Dutch ship was eaten up in two months' time, and the general had all her guns; and it is probable he did expect to have had ours: which I do believe was the main reason that made him so forward in assisting us to get our ship into the river, for when we came out again we had no assistance from him. We had no worms till we came to this place: for when we careened at the Marias, the worm had not touched us; nor at Guam, for there we scrubbed; nor after we came to the island Mindanao; for at the south-east end of the island we heeled and scrubbed also. The Mindanaians are so sensible of these destructive insects, that whenever they come from sea, they immediately hale their ship into a dry dock, and burn her bottom, and there let her lie dry till they are ready to go to sea again. The canoes or prows they hale up dry, and never suffer them to be long in the water. It is reported that those worms which get into a ship's bottom in the salt water, will die in the fresh water; and that the fresh water worms will die in salt water; but in the brackish water both sorts will increase prodigiously. Now this place where we lay was sometimes brackish water, yet commonly fresh; but what sort of worm this was I know not. Some men are of opinion, that these worms breed in the plank; but I am persuaded they breed in the sea: for I have seen millions of them swimming in the water, particularly in the bay of Panama; for there Captain Davis, Captain Swan, and myself, and most of our men, did take notice of them divers times, which was the reason of our cleaning so often while we were there: and these were the largest worms that I did ever see. I have also



seen them in Virginia, and in the bay of Campeachy; in the latter of which places the worms eat prodigiously. They are always in bays, creeks, mouths of rivers, and such places as are near the shore; being never found far out at sea, that I could ever learn: yet a ship will bring them lodged in its plank for a great way.

Having thus ript off all our worm-eaten plank, and clapped on new, by the beginning of December 1686, our ship's bottom was sheathed and tallowed, and the 10th day we went over the bar and took aboard the iron and lead that we could not sell, and began to fill our water, and fetch aboard rice for our voyage: but Captain Swan remained ashore still, and was not yet determined when to sail, or whither. But I am well assured that he did never intend to cruize about Manila, as his crew designed; for I did once ask him, and he told me, that what he had already done of that kind he was forced to; but now being at liberty, he would never more engage in any such design: for, said he, there is no Prince on earth is able to wipe off the stain of such actions. What other designs he had I know not, for he was commonly very cross; yet he did never propose doing any thing else, but only ordered the provision to be got aboard in order to sail; and I am confident if he had made a motion to go to any English factory, most of his men would have consented to it, though probably some would have still opposed it. However, his authority might soon have over-swayed those that were refractory; for it was very strange to see the awe that these men were in of him, for he punished the most stubborn and daring of his men. Yet when we had brought the ship out into the road, they were not altogether so submissive as while it lay in the river, though even then it was that he punished Captain Teat.

I was at that time a hunting with the general for beef, which he had a long time promised us. But now I saw that there was no credit to be given to his word; for I was a week out with him and saw but four cows, which were so wild, that we did not get one. There were five or six more of our company with me; these who were young men, and had Dalilahs there, which made them fond of the place, all agreed with the general to tell Captain Swan that there were beeves enough, only they were wild. But I told him the truth, and advised him not to be too credulous of the general's promises. He seemed to be very angry, and stormed behind the general's back, but in his presence was very mute, being a man of small courage.

It was about the 20th day of December when we returned from hunting, and the general designed to go again to another place to hunt for beef; but he staid till after Christmas day, because some of us designed to go with him; and Captain Swan had desired all his men to be aboard that day, that we might keep it solemnly together: and accordingly he sent aboard a buffalo the day before, that we might have a good dinner. So the 25th day about 10 o'clock, Captain Swan came aboard, and all his men who were ashore: for you must understand that near a third of our men lived constantly ashore, with their comrades and pagallies, and some with women servants, whom they hired of their masters for concubines. Some of our men also had houses, which they hired or bought, for houses are very cheap, for five or six dollars. For many of them having more money than they knew what to do with, eased themselves here of the trouble of telling it, spending it very lavishly, their prodigality making the people impose upon them, to the making the rest of us pay the dearer for what we bought, and to endangering the like impositions upon such Englishmen as may come here hereafter. For the Mindanaians knew how to get our squires' gold from them (for we had no silver), and when our men wanted silver, they would change now and then an ounce of gold, and could get for it no more than ten or eleven dollars for a Mindanao ounce, which they would not part with again under eighteen dollars. Yet this,



this, and the great prices the Mindanaians set on their goods, were not the only way to lessen their stocks; for their pagallies and comrades would often be begging somewhat of them, and our men were generous enough, and would bestow half an ounce of gold at a time, in a ring for their pagallies, or in a silver wristband, or hoop to come about their arms, in hopes to get a night's lodging with them.

When we are all aboard on Christmas day, Captain Swan and his two merchants; I did expect that Captain Swan would have made some proposals, or have told us his designs; but he only dined and went ashore again, without speaking any thing of his mind. Yet even then I do think that he was driving on a design of going to one of the spice-islands to load with spice; for the young man before-mentioned, who I said was sent by his uncle, the sultan of a spice-island near Ternate, to invite the English to their island, came aboard at this time, and after some private discourse with Captain Swan, they both went ashore together. This young man did not care that the Mindanaians should be privy to what he said. I have heard Captain Swan say that he offered to load his ship with spice, provided he would build a small fort, and leave some men to secure the island from the Dutch; but I am since informed, that the Dutch have now got possession of the island.

The next day after Christmas, the general went away again, and five or six Englishmen with him, of whom I was one, under pretence of going a hunting; and we all went together by water in his prow, together with his women and servants, to the hunting-place. The general always carried his wives and children, his servants, his money and goods with him: so we all embarked in the morning, and arrived there before night. I have already described the fashion of their prows, and the rooms made in them. We were entertained in the general's room or cabin. Our voyage was not so far, but that we reached our fort before night.

At this time one of the general's servants had offended, and was punished in this manner: he was bound fast flat on his belly, on a bamboo belonging to the prow, which was so near the water, that by the vessel's motion, it frequently delved under water, and the man along with it; and sometimes when hoisted up, he had scarce time to blow before he would be carried under water again.

When we had rowed about two leagues, we entered a pretty large deep river, and rowed up a league further, the water salt all the way. There was a pretty large village, the houses built after the country fashion. We landed at this place, where there was a house made ready immediately for us. The general and his women lay at one end of the house, and we at the other end, and in the evening all the women in the village danced before the general.

While we staid here, the general with his men went out every morning betimes, and did not return till four or five o'clock in the afternoon, and he would often compliment us, by telling us what good trust and confidence he had in us, saying that he left his women and goods under our protection, and that he thought them as secure with us six, (for we had all our arms with us) as if he had left one hundred and nine of his own men to guard them. Yet for all this great confidence, he always left one of his principal men, for fear some of us should be too familiar with his women.

They did never stir out of their own room when the general was at home, but as soon as he was gone out they would presently come into our room, and sit with us all day, and ask a thousand questions of us concerning our English women, and our customs. You may imagine that before this time some of us had attained so much of their language as to understand them, and give them answers to their demands. I remember that one day they asked how many wives the King of England had? We told them  
but

but one, and that our English laws did not allow of any more. They said it was a strange custom that a man should be confined to one woman; some of them said it was a very bad law, but others again said it was a good law; so there was a great dispute among them about it. But one of the general's women said positively, that our law was better than theirs, and made them all silent by the reason which she gave for it. This was the War 'Queen, as we called her, for she did always accompany the general whenever he was called out to engage his enemies, but the rest did not.

By this familiarity among the women, and by often discouraging them, we came to be acquainted with their customs and privileges. The general lies with his wives by turns, but she by whom he had the first son has a double portion of his company: for when it comes to her turn she has him two nights, whereas the rest have him but one. She with whom he is to lie at night, seems to have a particular respect shewn her by the rest all the precedent day; and for a mark of distinction, wears a striped silk handkerchief about her neck, by which we knew who was Queen that day.

We lay here about five or six days, but did never in all that time see the least sign of any beef, which was the business we came about, neither were we suffered to go out with the general to see the wild kine, but we wanted for nothing else: however this did not please us, and we often importuned him to let us go out among the cattle. At last he told us, that he had provided a jar of rice-drink to be merry with us, and after that we should go with him.

This rice-drink is made of rice boiled and put into a jar, where it remains a long time steeping in water. I know not the manner of making it, but it is very strong pleasant drink. The evening when the general designed to be merry, he caused a jar of this drink to be brought into our room, and he began to drink first himself, then afterwards his men, so they took turns till they were all as drunk as swine, before they suffered us to drink; after they had enough then we drank, and they drank no more, for they will not drink after us. The general leaped about our room a little while, but having his load, soon went to sleep.

The next day we went out with the general into the savannah, where we had near one hundred men making of a large pen to drive the cattle into: for that is the manner of their hunting, having no dogs. But I saw not above eight or ten cows, and those as wild as deer, so that we got none this day: yet the next day some of his men brought in three heifers, which they killed in the savannah. With these we returned aboard, they being all that we got there.

Captain Swan was much vexed at the general's actions; for he promised to supply us with as much beef as we should want, but now either could not or would not make good his promise. Beside he failed to perform his promise in a bargain of rice, that we were to have for the iron which we sold him, but he put us off still from time to time, and would not come to any account. Neither were these all his tricks; for a little before his son was circumcised, (of which I spake in the foregoing chapter,) he pretended a great freight for money to defray the charges of that day, and therefore desired Captain Swan to lend him about twenty ounces of gold; for he knew that Captain Swan had a considerable quantity of gold in his possession, which the general thought was his own, but indeed he had none but what belonged to the merchants; however he lent it the general; but when he came to an account with Captain Swan, he told him, that it was usual at such solemn times to make presents, and that he received it as a gift. He also demanded payment for the victuals that our captain and his men did eat at his house. These things startled Captain Swan, yet how to help himself he knew not. But all this, with other inward troubles, lay hard on our captain's

tain's spirits, and put him very much out of humour : for his own company were pressing him every day to be gone, because now was the height of the easterly monsoon, the only wind to carry us farther into the Indies.

About this time some of our men, who were weary and tired with wandering, ran away into the country and absconded, they being assisted, as was generally believed, by Raja Laut. There were others also, who fearing we should not go to an English port, bought a canoe, and designed to go in her to Borneo : for not long before the Mindanao vessel came from thence, and brought a letter directed to the chief of the English factory at Mindanao. This letter the general would have Captain Swan have opened, but he thought it might come from some of the East India merchants whose affairs he would not intermeddle with, and therefore did not open it. I since met with Captain Bowry at Achin, and telling him this story, he said that he sent that letter, supposing that the English were settled there at Mindanao ; and by this letter we also thought that there was an English factory at Borneo, so here was a mistake on both sides. But this canoe wherewith some of them thought to go to Borneo, Captain Swan took from them, and threatened the undertakers very hardly ; however this did not so far discourage them, for they secretly bought another ; but their designs taking air, they were again frustrated by Captain Swan.

The whole crew were at this time under a general disaffection, and full of very different projects, and all for want of action. The main division was between those that had money and those that had none. There was a great difference in the humours of these ; for they that had money lived ashore, and did not care for leaving Mindanao, whilst those that were poor lived aboard, and urged Captain Swan to go to sea. These began to be unruly as well as dissatisfied, and sent ashore the merchants' iron to sell for rack and honey to make punch, wherewith they grew drunk and quarrelsome ; which disorderly actions deterred me from going aboard, for I did ever abhor drunkenness, which now our men that were aboard abandoned themselves wholly to.

Yet these disorders might have been crushed if Captain Swan had used his authority to suppress them : but he with his merchants living always ashore, there was no command, and therefore every man did what he pleased, and encouraged each other in his villainies. Now Mr. Harthop, who was one of Captain Swan's merchants, did very much importune him to settle his resolutions, and declare his mind to his men, which at last he consented to do ; therefore he gave warning to all his men to come aboard the 13th day of January 1687.

We did all earnestly expect to hear what Captain Swan would propose, and therefore were very willing to go aboard ; but unluckily for him, two days before this meeting was to be, Captain Swan sent aboard his gunner, to fetch something ashore out of his cabin. The gunner rummaging to find what he was sent for, among other things took out the captain's journal from America to the island Guam, and laid down by him. This journal was taken up by one John Read, a Bristol man, whom I have mentioned in my fourth chapter. He was a pretty ingenious young man, and of a very civil carriage and behaviour. He was also accounted a good artist, and kept a journal, and was now prompted by his curiosity to peep into Captain Swan's journal to see how it agreed with his own ; a thing very usual among the seamen that keep journals, when they have an opportunity, and especially young men who have no great experience. At the first opening of the book he lighted on a place in which Captain Swan had inveighed bitterly against most of his men, especially against another John Reed a Jamaica man. This was such stuff as he did not seek after : but hitting so pat on this subject his curiosity led him to pry farther, and therefore while the gunner was busy he conveyed

veyed the book away to look over it at his leisure. The gunner having dispatched his business, locked up the cabin-door, not missing the book, and went ashore. Then John Reed shewed it to his namesake and to the rest that were aboard, who were by this time the biggest part of them ripe for mischief; only wanting some fair pretence to set themselves to work about it. Therefore looking on what was written in this journal to be matter sufficient for them to accomplish their ends, Captain Teat, who as I said before had been abused by Captain Swan, laid hold on this opportunity to be revenged for his injuries; and aggravated the matter to the height, persuading the men to turn out Captain Swan from being commander, in hopes to have commanded the ship himself. As for the seamen they were easily persuaded to any thing, for they were quite tired with this long and tedious voyage, and most of them despaired of ever getting home, and therefore did not care what they did, or whither they went. It was only want of being busied in some action that made them so uneasy; therefore they consented to what Teat proposed, and immediately all that were aboard bound themselves by oath to turn Captain Swan out, and to conceal this design from those that were ashore until the ship was under sail; which would have been presently if the surgeon or his mate had been aboard, but they were both ashore, and they thought it no prudence to go to sea without a surgeon; therefore the next morning they sent ashore one John Cookworthy to hasten off either the surgeon or his mate, by pretending that one of the men in the night broke his leg by falling into the hold. The surgeon told him that he intended to come aboard the next day with the captain, and would not come before, but sent his mate Herman Coppinger.

This man sometime before this was sleeping at his pagally's and a snake twisted himself about his neck, but afterwards went away without hurting him. In this country it is usual to have the snakes come into the houses and into the ships too, for we had several come aboard our ship when we lay in the river. But to proceed; Herman Coppinger provided to go aboard, and the next day being the time appointed for Captain Swan and all his men to meet aboard, I went aboard with him, neither of us distrusted what was designing by those aboard till we came thither; then we found it was only a trick to get the surgeon off; for now, having obtained their desires, the canoe was sent ashore again immediately, to desire as many as they could meet to come aboard, but not to tell the reason lest Captain Swan should come to hear of it.

The thirteenth day in the morning they weighed, and fired a gun; Captain Swan immediately sent aboard Mr. Nelly, who was now his chief mate, to see what the matter was; to him they told all their grievances, and shewed him the journal. He persuaded them to stay till the next day for an answer from Captain Swan and the merchants; so they came to an anchor again, and the next morning Mr. Harthop came aboard; he persuaded them to be reconciled again, or at least to stay and get more rice, but they were deaf to it, and weighed again while he was aboard. Yet at Mr. Harthop's persuasion they promised to stay till two o'clock in the afternoon for Captain Swan, and the rest of the men if they would come aboard; but they suffered no man to go ashore, except one William Williams that had a wooden leg, and another that was a lawyer.

If Captain Swan had yet come aboard, he might have dashed all their designs; but he neither came himself, as a captain of any prudence and courage would have done, nor sent till the time was expired. So we left Captain Swan and about thirty-six men ashore in the city, and six or eight that run away; and about sixteen we had buried there; the most of which died by poison. The natives are very expert at poisoning, and do it upon small occasions; nor did our men want for giving offence, through their general rogueries, and sometimes by dallying too familiarly with their women, even before  
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their faces. Some of their poisons are slow and lingering, for we had some now aboard who were poisoned there, but died not till some months after.

CHAP. IV. — *They depart from the River of Mindanao. — Of the Time lost or gained in sailing round the World: with a Caution to Seamen about the Allowance they are to take for the Difference of the Sun's Declination. — The South Coast of Mindanao. — Chambongo Town and Harbour, with its neighbouring Quays. — Green Turtle. — Ruins of a Spanish Fort. — The Westernmost Point of Mindanao. — Two Prows of the Sologues laden from Manila. — An Isle to the West of Sebo. — Walking Canes. — Isle of Batts, very large; and numerous Turtle and Manatee. — A dangerous Shoal. — They sail by Panay belonging to the Spaniards, and others of the Philippine Islands. — Isle of Mindora. — Two Barks taken. — A further Account of the Isle Luconia, and the City and Harbour of Manila. — They go off Pulo Condore to lie there. — The Shoals of Pracel, &c. — Pulo Condore. — The Tar Tree. — The Mango. — Grape Tree. — The wild or Bastard Nutmeg. — Their Animals. — Of the Migration of the Turtle from Place to Place. — Of the commodious Situation of Pulo Condore; its Water, and its Cochinchinese Inhabitants. — Of the Malayan Tongue. — The Custom of prostituting their Women in these Countries, and in Guinea. — The Idolatry here, at Tunquin, and among the Chinese Seamen, and of a Procession at Fort St. George. — They refit their Ship. — Two of them die of the Poison they took at Mindanao. — They take in Water and a Pilot for the Bay of Siam. — Pulo Uby; and Point of Cambodia. — Two Cambodian Vessels. — Isles in the Bay of Siam. — The tight Vessels and Scamen of the Kingdom of Champa. — Storms. — A Chinese Jonk from Palimbam in Sumatra. — They come again to Pulo Condore. — A bloody Fray with a Malayan Vessel. — The Surgeon's and the Author's Desires of leaving their Crew.*

THE 14th day of January 1687, at three o'clock in the afternoon, we sailed from the river of Mindanao, designing to cruise before Manila.

It was during our stay at Mindanao, that we were first made sensible of the change of time in the course of our voyage: for having travelled so far westward, keeping the same course with the sun, we must consequently have gained something insensibly in the length of the particular days, but have lost in the tale, the bulk or number of the days or hours. According to the different longitudes of England and Mindanao this isle being west from the Lizard, by common computation, about 210 degrees, the difference of time at our arrival at Mindanao ought to be about fourteen hours; and so much we should have anticipated our reckoning, having gained it by bearing the sun company. Now the natural day in every particular place must be consonant to itself; but this going about with, or against the sun's course, will of necessity make a difference in the calculation of the civil day between any two places. Accordingly at Mindanao and all other places in the East Indies we found them reckoning a day before us, both natives and Europeans; for the Europeans coming eastward by the Cape of Good Hope, in a course contrary to the sun and us, wherever we met they were a full day before us in their accounts. So among the Indian Mahometans here, their Friday, the day of their Sultan's going to their mosques, was Thursday with us, though it were Friday also with those who came eastward from Europe. Yet at the Ladrone islands we found the Spaniards of Guam keeping the same computation with ourselves; the reason of which I take to be that they settled that colony by a course westward from Spain; the Spaniards going first to America, and thence to the Ladrones and Philippines. But how the reckoning was at Manila and the rest of the Spanish colonies in the Philippine islands,

islands, I know not; whether they keep it as they brought it, or corrected it by the accounts of the natives; and of the Portuguese, Dutch and English, coming the contrary way from Europe.

One great reason why seamen ought to keep the difference of time as exact as they can, is that they may be the more exact in the latitudes. For our tables of the sun's declination, being calculated for the meridians of the places in which they were made, differ about twelve minutes from those parts of the world that lie on their opposite meridians, in the months of March and September; and in proportion to the sun's declination, at other times of the year also. And should they run farther as we did, the difference would still increase upon them, and be an occasion of great errors. Yet even able seamen in these voyages are hardly made sensible of this, though so necessary to be observed, for want of duly attending to the reason of it, as it happened among those of our crew; who after we had past 180 degrees, began to decrease the difference of declination, whereas they ought still to have increased it, for it all the way increased upon us.

We had the wind at north-north-east, fair clear weather, and a brisk gale. We coasted to the westward, on the south side of the island of Mindanao, keeping within four or five leagues of the shore. The land from hence trends away west by south. It is of a good height by the sea, and very woody, and in the country we saw high hills.

The next day we were abreast of Cambongo; a town in this island, and thirty leagues from the river of Mindanao. Here is said to be a good harbour, and a great settlement, with plenty of beef and buffaloe. It is reported that the Spaniards were formerly fortified here also: there are two shoals lie off this place, two or three leagues from the shore. From hence the land is more low and even; yet there are some hills in the country.

About six leagues before we came to the west end of the island Mindanao, we fell in with a great many a small low islands or keys, and about two or three leagues to the southward of these keys, there is a long island stretching north-east, and south-west, about twelve leagues. This island is low by the sea on the north side, and has a ridge of hills in the middle, running from one end to the other. Between this isle and the small keys, there is a good large channel: among the keys also there is a good depth of water, and a violent tide; but on what point of the compass it flows, I know not, nor how much it riseth and falls.

The seventeenth day we anchored on the east side of all these keys, in eight fathom water, clean sand. Here are plenty of green turtle, whose flesh is as sweet as any in the West Indies: but they are very shy. A little to the westward of these keys on the island Mindanao, we saw abundance of cocoa-nut trees: therefore we sent our canoa ashore, thinking to find inhabitants, but found none, nor sign of any; but great tracks of hogs, and great cattle; and close by the sea there were ruins of an old fort; the walls thereof were of a good height, built with stone and lime, and by the workmanship seemed to be Spanish. From this place the land trends west-north-west, and it is of an indifferent height by the sea. It runs on this point of the compass four or five leagues, and then the land trends away north-north-west, five or six leagues farther, making with many bluff points.

We weighed again the fourteenth day, and went through between the keys; but met such uncertain tides, that we were forced to anchor again. The twenty-second day we got about the westernmost point of all Mindanao, and stood to the northward, plying under the shore, and having the wind at north-north-east a fresh gale.



gale. As we failed along further, we found the land to trend north-north-east. On this part of the island the land is high by the sea, with full bluff points, and very woody. There are some small sandy bays, which afford streams of fresh water.

Here we met with two prows belonging to the Sologues, one of the Mindanaian nations before mentioned. They came from Manila laden with silks and calicoes. We kept on this western part of the island steering northerly, till we came abreast of some other of the Philippine Islands, that lay to the northward of us, then steered away towards them; but still keeping on the west side of them, and we had the winds at north-north-east.

The third of February we anchored in a good bay on the west side of the island, in latitude nine degrees, fifty-five minutes, where we had thirteen fathom water, good soft oaze. This island hath no name that we could find in any book, but lieth on the west side of the island Sebo. It is about eight or ten leagues long, mountainous and woody. At this place Captain Read, who was the same Captain Swan had so much railed against in his journal, and was now made captain in his room (as Captain Teat was made master, and Mr. Henry More quarter-master,) ordered the carpenters to cut down our quarter deck to make the ship snug, and the fitter for sailing. When that was done we heeled her, scrubbed her bottom, and tallowed it. Then we filled all our water, for here is a delicate small run of water.

The land was pretty low in this bay, the mould black and fat, and the trees of several kinds, very thick and tall. In some places we found plenty of canes, such as we use in England for walking canes. These were short jointed, not above two feet and a half, or two feet ten inches the longest, and most of them not above two feet. They run along on the ground like a vine; or taking hold of their trees, they climb up to their very tops. They are fifteen or twenty fathoms long, and much of a bigness from the root, till within five or six fathoms of the end. They are of a pale green colour, clothed over, with a coat of short thick hairy substance, of a dun colour; but it comes off by only drawing the cane through your hand. We did cut many of them, and they proved very tough heavy canes.

We saw no houses, nor sign of inhabitants; but while we lay here, there was a canoa with six men came into this bay; but whither they were bound, or from whence they came, I know not. They were Indians, and we could not understand them.

In the middle of this bay, about a mile from the shore, there is a small low woody island, not above a mile in circumference; our ship rode about a mile from it. This island was the habitation of an incredible number of great bats, with bodies as big as ducks, or large fowl, and with vast wings: for I saw at Mindanao one of this sort, and I judge that the wings stretched out in length, could not be less asunder than seven or eight feet from tip to tip; for it was much more than any of us could fathom with our arms extended to the utmost. The wings are for substance like those of other bats, of a dun or mouse colour. The skin or leather of them hath ribs running along it, and draws up in three or four folds; and at the joints of those ribs and the extremities of the wings, there are sharp and crooked claws, by which they may hang on any thing. In the evening as soon as the sun was set, these creatures would begin to take their flight from this island, in swarms like bees, directing their flight over to the main island; and whither afterwards I know not. Thus we should see them rising up from the island till night hindered our sight: and in the morning as soon as it was

light, we should see them returning again like a cloud, to the small island, till sun rising. This course they keep constantly while we lay here, affording us every morning and evening an hour's diversion in gazing at them, and talking about them; but our curiosity did not prevail with us to go ashore to them, ourselves and canoes being all the day time taken up in business about our ship. At this isle also we found plenty of turtle and manatee, but no fish.

We stayed here till the tenth of February, 1687, and then having completed our business, we sailed hence with the wind at north. But going out we struck on a rock where we lay two hours: it was very smooth water, and the tide of flood, or else we should there have lost our ship. We struck off a great piece of our rudder, which was all the damage that we received, but we more narrowly mist loosing our ships this time, than in any other in the whole voyage. This is a very dangerous shoal, because it does not break, unless probably it may appear in foul weather. It lies about two miles to the westward, without the small Batt Island. Here we found the tide of flood setting to the southward, and the ebb to the northward.

After we were past this shoal, we coasted along by the rest of the Philippine islands, keeping on the west side of them. Some of them appeared to be very mountainous dry land. We saw many fires in the night as we passed by Panay, a great island settled by Spaniards: and by the fires up and down it seems to be well settled by them; for this is a Spanish custom, whereby they give notice of any danger or the like from sea, and it is probable they had seen our ship the day before. This is an unfrequented coast, and it is rare to have any ship seen there. We touched not at Panay, nor any where else, though we saw a great many small islands to the westward of us, and some shoals, but none of them laid down in our draughts.

The 18th day of February we anchored at the north-west end of the island Mindora, in ten fathoms water, about three quarters of a mile from the shore. Mindora is a large island, the middle of it lying in latitude thirteen degrees, about forty leagues long, stretching north-west and south-east. It is high and mountainous, and not very woody. At this place where we anchored, the land was neither very high nor low. There was a small brook of water, and the land by the sea was very woody, and the trees high and tall; but a league or two farther in the woods are very thin and small. Here we saw great tracks of hog and beef, and we saw some of each, and hunted them; but they were wild, and we could kill none.

While we were here, there was a canoc with four Indians came from Manila. They were very shy of us a while: but at last, hearing us speak Spanish, they came to us, and told us, that they were going to a friar, that lived at an Indian village towards the south-east end of the island. They told us also, that the harbour of Manila is seldom or never without twenty or thirty sail of vessels, most Chinese, some Portuguese, and some few the Spaniards have of their own. They said, that when they had done their business with the friar they would return to Manila, and hope to be back again at this place in four days time. We told them that we came for a trade with the Spaniards at Manila, and should be glad if they would carry a letter to some merchant there, which they promised to do. But this was only a pretence of ours, to get out of them what intelligence we could as to their shipping, strength, and the like, under colour of seeking a trade; for our business was to pillage. Now, if we had really designed to have traded there, this was as fair an opportunity as men could have desired: for these men could have brought us to the  
friar



friar that they were going to, and a small present to him would have engaged him to do any kindness for us in the way of trade; for the Spanish governors do not allow of it, and we must trade by stealth.

The twenty-first day we went from hence with the wind at east-north-east, a small gale. The twenty-third day in the morning we were fair by the south-east end of the island Luconia, the place that had been so long desired by us. We presently saw a sail coming from the northward, and making after her we took her in two hours time. She was a Spanish bark, that came from a place called Pangasinan, a small town on the north end of Luconia, as they told us; probably the same with Pongassiny, which lies on a bay at the north-west side of the island. She was bound to Manila, but had no goods on board; and therefore we turned her away.

The twenty-third we took another Spanish vessel that came from the same place as the other. She was laden with rice and cotton-cloth, and bound for Manila also. These goods were purposely for the Acapulco ship: the rice was for the men to live on while they lay there and in their return, and the cotton-cloth was to make sail. The master of this prize was boatswain of the Acapulco ship which escaped us at Guam and was now at Manila. It was this man that gave us the relation of what strength it had, how they were afraid of us there, and of the accident that happened to them, as is before mentioned in the tenth chapter. We took these two vessels within seven or eight leagues of Manila.

Luconia I have spoken of already; but I shall now add this further account of it. It is a great island, taking up between six and seven degrees of latitude in length, and its breadth near the middle is about sixty leagues, but the ends are narrow. The north end lies in about nineteen degrees north latitude, and the south end is about twelve degrees thirty minutes. This great island hath abundance of small keys or islands lying about it, especially at the north end. The south side fronts towards the rest of the Philippine islands: of these that are its nearest neighbours, Mindora, lately mentioned, is the chief, and gives name to the sea or streight that parts it and the other islands from Luconia, being called the streights of Mindora.

The body of the island Luconia is composed of many spacious plain savannahs, and large mountains. The north end seems to be more plain and even, I mean freer from hills than the south end; but the land is all along of a good height. It does not appear so flourishing and green as some of the other islands in this range; especially that of St. John, Mindanao, Bat Island, &c. yet in some places it is very woody. Some of the mountains of this island afford gold, and the savannahs are well stocked with herds of cattle, especially buffaloes. These cattle are in great plenty all over the East Indies; and therefore it is very probable that there were many of these here even before the Spaniards came hither. But now there are also plenty of other cattle, as I have been told, as bullocks, horses, sheep, goats, hogs, &c. brought hither by the Spaniards.

It is pretty well inhabited with Indians, most of them, if not all, under the Spaniards, who now are masters of it. The native Indians do live together in towns; and they have priests among them to instruct them in the Spanish religion.

Manila, the chief, or perhaps the only city, lies at the foot of a ridge of high hills, facing upon a spacious harbour near the south-west point of the island, in about the latitude of fourteen degrees north. It is environed with a high strong wall, and very well fortified with forts and breast-works. The houses are large, strongly built, and covered with pantile. The streets are large and pretty regular; with a parade in the midst after the Spanish fashion. There are a great many fair buildings, besides churches and other religious houses; of which there are not a few.

The harbour is so large, that some hundreds of ships may ride here; and is never without many, both of their own and strangers. I have already given you an account of the two ships going and coming between this place and Acapulco. Besides them, they have some small vessels of their own and they do allow the Portuguese to trade here, but the Chinese are the chiefest merchants, and they drive the greatest trade; for they have commonly twenty, thirty, or forty jonks in the harbour at a time, and a great many merchants constantly residing in the city, besides shopkeepers and handicraftsmen in abundance. Small vessels run up near the town; but the Acapulco ships, and others of greater burden, lie a league short of it, where there is a strong fort also, and store-houses to put goods in.

I had the major part of this relation, two or three years after this time, from Mr. Coppinger, our surgeon; for he made a voyage hither from Porto Nova, a town on the coast of Coromandel, in a Portuguese ship, as I think. Here he found ten or twelve of Captain Swan's men; some of those that we left at Mindanao. For after we came from thence, they bought a prow there, by the instigation of an Irishman, who went by the name of John Fitz-Gerald, a person that spoke Spanish very well; and so in this their prow they came hither. They had been here but eighteen months when Mr. Coppinger arrived here, and Mr. Fitz-Gerald had in this time gotten a Spanish Mustefa woman to wife, and a good dowry with her. He then professed physic and surgery, and was highly esteemed among the Spaniards for his supposed knowledge in those arts; for being always troubled with sore shins while he was with us, he kept some plaisters and salves by him; and with these he set up upon his bare natural stock of knowledge, and his experience in kibes. But then he had a very great stock of confidence withal to help out the other, and being an Irish Roman Catholic, and having the Spanish language, he had a great advantage of all his comforts; and he alone lived well there of them all. We were not within sight of this town, but I was shewn the hills that overlooked it, and drew a draft of them as we lay off at sea; which I have caused to be engraven among a few others that I took myself.

The time of the year being now too far spent to do any thing here, it was concluded to sail from hence to Pulo Condore, a little parcel of islands, on the coast of Cambodia, and carry this prize with us, and there careen if we could find any convenient place for it, designing to return hither again by the latter end of May, and wait for the Acapulco ship that comes about that time. By our drafts (which we were guided by, being strangers to these parts,) this seemed to us then to be a place out of the way, where we might lie snug for a while, and wait the time of returning for our prey. For we avoided as much as we could the going to lie by at any great place of commerce, lest we should become too much exposed, and perhaps be assaulted by a force greater than our own.

So having set our prisoners ashore, we sailed from Luconia the 26th day of February, with the wind east-north-east, and fair weather, and a brisk gale. We were in latitude fourteen degrees north when we began to steer away for Pulo Condore, and we steered south by west. In our way thither we went pretty near the shoals of Pracel, and other shoals which are very dangerous. We were very much afraid of them, but escaped them without so much as seeing them, only at the very south end of the Pracel shoals we saw three little sandy islands or spots of sand standing just above water within a mile of us.

It was the 13th day of March before we came in sight of Pulo Condore, or the island Condore, as Pulo signifies. The 14th day about noon we anchored on the north side of the island, against a sandy bay, two miles from the shore, in ten fathoms clean hard sand,

land, with both ship and prize. Pulo Condore is the principal of a heap of islands, and the only inhabited one of them. They lie in latitude eight degrees forty minutes north, and about twenty leagues south, and by east from the mouth of the river of Cambodia. These islands lie so near together, that at a distance they appear to be but one island.

Two of these islands are pretty large, and of a good height; they may be seen fourteen or fifteen leagues at sea; the rest are but little spots. The biggest of the two (which is the inhabited one) is about four or five leagues long, and lies east and west. It is not above three miles broad at the broadest place; in most places not above a mile wide. The other large island is about three miles long, and half a mile wide. This island stretcheth north and south. It is so conveniently placed at the west end of the biggest island, that between both there is formed a very commodious harbour. The entrance of this harbour is on the north side, where the two islands are near a mile asunder. There are three or four small keys, and a good deep channel between them and the biggest island. Towards the south end of the harbour the two islands do in a manner close up, leaving only a small passage for boats and canoes. There are no more islands on the north side, but five or six on the south side of the great island.

The mould of these islands for the biggest part is blackish, and pretty deep, only the hills are somewhat stony. The eastern part of the biggest island is sandy, yet all clothed with trees of divers sorts. The trees do not grow so thick as I have seen them in some places, but they are generally large and tall, and fit for any use.

There is one sort of tree much larger than any other on this island, and which I have not seen any where else. It is about three or four feet diameter in the body, from whence is drawn a sort of clammy juice, which being boiled a little becomes perfect tar; and if you boil it much it will become hard as pitch. It may be put to either use: we used it both ways, and found it to be very serviceable. The way that they get this juice, is by cutting a great gap horizontally in the body of the tree, half through and about a foot from the ground; and then cutting the upper part of the body aslope inwardly downward, till in the middle of the tree it meets with the traverse cutting or plain. In this plain horizontal semicircular stump they make a hollow like a basin, that may contain a quart or two. Into this hole the juice which drains from the wounded upper part of the tree falls, from whence you must empty it every day. It will run thus for some months, and then dry away, and the tree will recover again.

The fruit trees that nature hath bestowed on these isles are mangoes, and trees bearing a sort of grape, and other trees bearing a kind of wild or bastard nutmegs. These all grow wild in the woods, and in very great plenty.

The mangoes here grow on trees as big as apple trees: those at Fort St. George are not so large. The fruit of these is as big as a small peach; but long and smaller towards the top: it is of a yellowish colour when ripe; it is very juicy, and of a pleasant smell, and delicate taste. When the mango is young they cut them in two pieces and pickle them with salt and vinegar, in which they put some cloves of garlick. This is an excellent sauce, and much esteemed; it is called mango-achar. Achar, I presume, signifies sauce. They make in the East Indies, especially at Siam and Pegu, several sorts of achar, as of the young tops of bamboos, &c. Bamboo-achar and mango-achar are most used. The mangoes were ripe when we were there, as were also the rest of these fruits, and they have then so delicate a fragrantcy, that we could smell them out in the thick woods if we had but the wind of them, while we were a good way from them, and could not see them; and we generally found them out this way.

Mangoes are common in many places of the East Indies; but I did never know any grow wild only at this place. These, though not so big as those I have seen at Achin, and at Maderas or Fort St. George, are yet every whit as pleasant as the best sort of their garden mangoes.

The grape tree grows with a strait body, of a diameter about a foot or more, and hath but few limbs or boughs. The fruit grows in clusters, all about the body of the tree, like the jack, durian, and cacao fruits. There are of them both red and white. They are much like such grapes as grow on our vines, both in shape and colour; and they are of a very pleasant winy taste. I never saw these but on the two biggest of these islands; the rest had no tar trees, mangoes, grape trees, nor wild nutmegs.

The wild nutmeg tree is as big as a walnut tree; but it does not spread so much. The boughs are gross, and the fruit grows among the boughs, as the walnut and other fruits. This nutmeg is much smaller than the true nutmeg, and longer also. It is inclosed with a thin shell, and a sort of mace encircling the nut within the shell. This bastard nutmeg is so much like the true nutmeg in shape, that at our first arrival here we thought it to be the true one; but it hath no manner of smell nor taste.

The animals of these islands are some hogs, lizards, and guanoes; and some of those creatures mentioned in Chap. XI. which are like, but much bigger than the guanoes.

Here are many sorts of birds, as parrots, paroquets, doves, and pigeons. Here are also a sort of wild cocks and hens: they are much like our tame fowl of that kind, but a great deal less, for they are about the bigness of a crow. The cocks do crow like ours, but much more small and shrill; and by their crowing we do first find them out in the woods where we shoot them. Their flesh is very white and sweet.

There are a great many limpets and muscles, and plenty of green turtle.

And upon this mention of turtle again, I think it not amiss to add some reasons to strengthen the opinion that I have given concerning these creatures removing from place to place. I have said in Chap. V. that they leave their common feeding places, and go to places a great way from thence, to lay, as particularly to the island Ascension. Now I have discoursed with some since that subject was printed, who are of opinion, that when the laying time is over they never go from thence, but lie somewhere in the sea about the island, which I think is very improbable; for there can be food for them there, as I could soon make appear; as particularly from hence, that the sea about the isle of Ascension is so deep as to admit of no anchoring but at one place, where there is no sign of grass; and we never bring up with our sounding lead any grass or weeds out of very deep seas, but sand, or the like, only. But if this be granted, that there is food for them, yet I have a great deal of reason to believe that the turtle go from hence; for after the laying time you shall never see them, and wherever turtle are, you will see them rise and hold their head above water to breathe, once in seven or eight minutes, or at longest in ten or twelve. And if any man does but consider how fish take their certain seasons of the year to go from one sea to another, this would not seem strange; even fowls also having their seasons to remove from one place to another.

These islands are pretty well watered with small brooks of fresh water, that run flush into the sea for ten months in the year. The latter end of March they begin to dry away, and in April you shall have none in the brooks but what is lodged in deep holes; but you may dig wells in some places. In May, when the rain comes, the land is again replenished with water, and the brooks run out into the sea.

These islands lie very commodiously in the way to and from Japan, China, Manila, Tunquin,

Tunquin, Cochin-China, and in general all this most easterly coast of the Indian continent, whether you go through the streights of Malacca, or the streights of Sunda, between Sumatra and Java; and one of them you must pass in the common way from Europe, or other parts of the East Indies; unless you mean to fetch a great compass round most of the East India islands, as we did. Any ship in distress may be refreshed and recruited here very conveniently; and, besides ordinary accommodations, be furnished with masts, yards, pitch, and tar. It might also be a convenient place to usher in a commerce with the neighbouring country of Cochin-China, and forts might be built to secure a factory; particularly at the harbour, which is capable of being well fortified.

The inhabitants of this island are by nation Cochin-Chinese, as they told us; for one of them spoke good Malayan, which language we learnt a smattering of, and some of us so as to speak it pretty well, while we lay at Mindanao; and this is the common tongue of trade and commerce (though it be not in several of them the native language) in most of the East India islands, being the *lingua Franca*, as it were, of these parts. I believe it is the vulgar tongue at Malacca, Sumatra, Java, and Borneo; but at Celebes, the Philippine islands, and the spice-islands, it seems borrowed for the carrying on of trade.

The inhabitants of Pulo Condore are but a small people in stature, well enough shaped, and of a darker colour than the Mindanayans. They are pretty long visaged, their hair is black and straight, their eyes are but small and black, their noses of a mean bigness and pretty high, their lips thin, their teeth white, and little mouths. They are very civil people, but extraordinary poor. Their chiefest employment is to draw the juice of those trees that I have described to make tar. They preserve it in wooden troughs; and when they have their cargo, they transport it to Cochin-China, their mother country. Some others of them employ themselves to catch turtle, and boil up their fat to oil, which they also transport home. These people have great large nets, with wide meshes to catch the turtle. The Jamaica turtlers have such; but I did never see the like nets but at Jamaica and here.

They are so free of their women, that they would bring them aboard and offer them to us; and many of our men hired them for a small matter. This is a custom used by several nations in the East Indies, as at Pegu, Siam, Cochin-China, and Cambodia, as I have been told. It is used at Tunquin also to my knowledge; for I did afterwards make a voyage thither, and most of our men had women on board all the time of our abode there. In Africa, also, on the coast of Guinea, our merchants, factors, and seamen that reside there, have their black mistresses. It is accounted a piece of policy to do it; for the chief factors and captains of ships have the great men's daughters offered them, the mandarins' or noblemen's at Tunquin, and even the King's wives in Guinea; and by this sort of alliance the country people are engaged to a greater friendship; and if there should arise any difference about trade, or any thing else, which might provoke the native to seek some treacherous revenge, to which all these heathen nations are very prone, then these Dalilahs would certainly declare it to their white friends, and so hinder their countrymen's design.

These people are idolaters; but their manner of worship I know not. There are a few scattering houses and plantations on the great island, and a small village on the south side of it; where there is a little idol temple, and an image of an elephant about five feet high, and in bigness proportionable, placed on one side of the temple; and a horse not so big placed the other side of it; both standing with their heads towards the south,

The temple itself was low and ordinary, built of wood, and thatched like one of their houses, which are but very meanly.

The images of the horse and the elephant were the most general idols that I observed in the temples of Tunquin, when I travelled there. There were other images also of beasts, birds, and fish. I do not remember I saw any human shape there, nor any such monstrous representations as I have seen among the Chinese. Wherever the Chinese seamen or merchants come (and they are very numerous all over these seas) they have always hideous idols on board their jonks or ships, with altars, and lamps burning before them. These idols they bring ashore with them; and beside those they have in common, every man hath one in his own house. Upon some particular solemn days I have seen their bonzies, or priests, bring whole armfuls of painted papers, and burn them with a great deal of ceremony, being very careful to let no piece escape them. The same day they killed a goat which had been purposely fattening a month before; this they offer or present before their idol, and then dress it and feast themselves with it. I have seen them do this in Tunquin, where I have at the same time been invited to their feasts; and at Bancouli, in the isle of Sumatra, they sent a shoulder of the sacrificed goat to the English, who eat of it, and asked me to do so too; but I refused.

When I was at Maderas, or Fort St. George, I took notice of a great ceremony used for several nights successively by the idolaters inhabiting the suburbs: both men and women (these very well clad) in a great multitude went in solemn procession with lighted torches, carrying their idols about with them. I knew not the meaning of it. I observed some went purposely carrying oil to sprinkle into the lamps, to make them burn the brighter. They began their round about eleven a clock at night, and having paced it gravely about the streets till two or three a clock in the morning, their idols were carried with much ceremony into the temple by the chief of the procession, and some of the women I saw enter the temple, particularly. Their idols were different from those of Tunquin, Cambodia, &c. being in human shape.

I have said already that we arrived at these islands the fourteenth day of March 1687. The next day we searched about for a place to careen in; and the sixteenth day we entered the harbour, and immediately provided to careen. Some men were set to fell great trees to saw into planks; others went to unrigging the ship; some made a house to put our goods in, and for the sail-maker to work in. The country people resorted to us, and brought us of the fruits of the island, with hogs, and sometimes turtle; for which they received rice in exchange, which we had a ship load of, taken at Manila. We bought of them also a good quantity of their pitchy liquor, which we boiled, and used about our ship's bottom. We mixed it first with lime, which we made here, and it made an excellent coat, and stuck on very well.

We staid in this harbour from the 16th day of March, till the 26th of April; in which time we made a new suit of sails of the cloth that was taken in the prize. We cut a spare main-top-mast, and sawed plank to sheath the ship's bottom; for she was not sheathed all over at Mindanao, and that old plank that was left on then we now ript off, and clapped on new.

While we lay here two of our men died, who were poisoned at Mindanao; they told us of it when they found themselves poisoned, and had lingered ever since. They were opened by our doctor, according to their own request before they died, and their livers were black, light and dry, like pieces of cork.

Our business being finished here, we left the Spanish prize taken at Manila, and most of the rice, taking out enough for ourselves; and on the 17th day we went from  
hence



hence to the place where we first anchored, on the north-side of the great island, purposely to water; for there was a great stream when we first came to the island, and we thought it was so now. But we found it dried up, only it stood in holes, two or three hogheads or a tun in a hole: therefore we did immediately cut bamboos, and made spouts, through which we conveyed the water down to the sea-side, by taking it up in bowls, and pouring it into these spouts or troughs. We conveyed some of it thus near half a mile. While we were filling our water, Captain Read engaged an old man, one of the inhabitants of this island, the same who I said could speak the Malayan language, to be his pilot to the bay of Siam; for he had often been telling us, that he was well acquainted there, and that he knew some islands there, where there were fishermen lived, who he thought could supply us with salt-fish to eat at sea; for we had nothing but rice to eat. The easterly monsoon was not yet done; therefore it was concluded to spend some time there, and then take the advantage of the beginning of the western monsoon, to return to Manila again.

The 21st day of April 1687, we sailed from Pulo Condore, directing our course west by south for the bay of Siam. We had fair weather, and a fine moderate gale of wind at east-north-east.

The 23d day we arrived at Pulo Ubi, or the island Ubi. This island is about forty leagues to the westward of Pulo Condore; it lies just at the entrance of the bay of Siam, at the south-west point of land, that makes the bay; namely, the point of Cambodia. This island is about seven or eight leagues round, and it is higher land than any of Pulo Condore isles. Against the south-east part of it there is a small key, about a cables' length from the main island. This Pulo Ubi is very woody, and it has good water on the north side, where you may anchor; but the best anchoring is on the east side against a small bay; then you will have the little island to the southward of you.

At Pulo Ubi we found two small barks laden with rice. They belonged to Cambodia, from whence they came not above two or three days before, and they touched here to fill water. Rice is the general food of all these countries, therefore it is transported by sea from one country to another, as corn in these parts of the world. For in some countries they produce more than enough for themselves, and send what they can spare to those places where there is but little.

The 24th day we went into the bay of Siam: this is a large deep bay, of which and of this kingdom I shall at present speak but little, because I design a more particular account of all this coast, to wit, of Tonquin, Cochin-China, Siam, Champa, Cambodia, and Malacca, making all the most easterly part of the continent of Asia, lying south of China: but to do it in the course of this voyage, would too much swell this volume; and I shall chuse therefore to give a separate relation of what I know or have learnt of them, together with the neighbouring parts of Sumatra, Java, &c. where I have spent some time.

We ran down into the bay of Siam, till we came to the islands that our Pulo Condore pilot told us of, which lie about the middle of the bay: but as good a pilot as he was, he ran us aground; yet we had no damage. Captain Read went ashore at these islands, where he found a small town of fishermen; but they had no fish to sell, and so we returned empty.

We had yet fair weather, and very little wind; so that being often becalmed, we were till the 13th day of May before we got to Pulo Ubi again. There we found two small vessels at an anchor on the east side: they were laden with rice and laquer, which is used in japanning of cabinets. One of these came from Champa, bound to the town of Malacca, which belongs to the Dutch, who took it from the Portuguese;

and this shews that they have a trade with Champa. This was a very pretty neat vessel, her bottom very clean and curiously coated; she had about forty men all armed with cortans, or broad swords, lances, and some guns, that went with a swivel upon their gunnel. They were of the idolaters, natives of Champa, and some of the briskest, most sociable, without fearfulness or shyness, and the most neat and dextrous about their shipping, of any such I have met with in all my travels. The other vessel came from the river of Cambodia, and was bound towards the streights of Malacca. Both of them stopped here, for the westerly winds now began to blow, which were against them, being somewhat bleated.

We anchored also on the east-side, intending to fill water. While we lay here we had very violent wind at south-west, and a strong current setting right to windward. The fiercer the wind blew, the more strong the current set against it. This storm lasted till the 20th day, and then it began to abate.

The 21st day of May we went back from hence towards Pulo Condore. In our way we overtook a great junk that came from Palimbang, a town on the island Sumatra: she was full laden with pepper which they bought there, and was bound to Siam: but it blowing so hard, she was afraid to venture into that bay, and therefore came to Pulo Condore with us, where we both anchored May the 24th. This vessel was of the Chinese make, full of little rooms or partitions, like our well-boats. I shall describe them in the next chapter. The men of this junk told us, that the English were settled on the island Sumatra, at a place called Sillabar; and the first knowledge we had that the English had any settlement on Sumatra was from these.

When we came to an anchor, we saw a small bark at an anchor near the shore; therefore Captain Read sent a canoe aboard her to know from whence they came; and supposing that it was a Malayan vessel, he ordered the men not to go aboard, for they are accounted desperate fellows, and their vessels are commonly full of men, who all wear creffets, or little daggers by their sides. The canoe's crew not minding the captain's orders went aboard, all but one man that staid in the canoe. The Malaysians, who were about twenty of them, seeing our men all armed, thought that they came to take their vessel; therefore at once, on a signal given, they drew out their creffets, and stabbed five or six of our men before they knew what the matter was. The rest of our men leaped over-board, some into the canoe, and some into the sea, and so got away. Among the rest, one Daniel Wallis leaped into the sea, who could never swim before nor since; yet now he swam very well a good while before he was taken up. When the canoes came aboard, Captain Read manned two canoes, and went to be revenged on the Malaysians; but they seeing him coming, did cut a hole in the vessel's bottom, and went ashore in their boat. Captain Read followed them, but they ran into the woods and hid themselves. Here we staid ten or eleven days, for it blew very hard all the time. While we staid here Herman Coppinger our surgeon went ashore, intending to live here; but Captain Read sent some men to fetch him again. I had the same thoughts, and would have gone ashore too, but waited for a more convenient place. For neither he nor I, when we were last on board at Mindanao, had any knowledge of the plot that was laid to leave Captain Swan, and run away with the ship; and being sufficiently weary of this mad crew, we were willing to give them the slip at any place from whence we might hope to get a passage to an English factory. There was nothing else of moment happened while we staid here\*.

\* He then proceeds to China, and returns to the Asiatic Islands.



CHAP. V.—*The Isles to which they gave the Names of Orange, Monmouth, Grafton, Bashee, and Goat Islands, in general, the Bashee Islands. — A Digression concerning the different Depths of the Sea near high or low Lands, Soil, &c. as before. — The Soil, Fruits and Animals of these Islands. — The Inhabitants and their Cloathing. — Rings of a yellow Metal like Gold — Their Houses built on remarkable Precipices. — Their Boats and Employments. — Their Food of Goat Skins, Entrails, &c. — Parcht Locusts. — Bashee or Sugar-cane Drink. — Of their Language and Original, Launces and Buffaloe Coats. — No Idols, nor civil Form of Government. — A young Man buried alive by them; supposed to be for Theft. — Their Wives and Children, and Husbandry. — Their Manners, Entertainments and Traffick. — Of the Ship's first Intercourse with these People, and Bartering with them. — Their Course among the Islands; their Stay there, and Provision to depart. — They are driven off by a violent Storm, and return. — The Natives Kindness to six of them left behind. — The Crew, discouraged by these Storms, quit their Design of cruising off Manila for the Acapulco Ship; and it is resolved to fetch a Compass to Cape Comorin, and so for the Red-Sea.*

THE sixth day of August we arrived at the five islands that we were bound to, and anchored on the east side of the northernmost island, in fifteen fathoms, a cable's length from the shore. Here, contrary to our expectation, we found abundance of inhabitants in sight; for there were three large towns all within a league of the sea; and another larger town than any of the three, on the backside of a small hill close by also, as we found afterwards. These islands lie in latitude twenty degrees twenty minutes north latitude by my observation, for I took it there, and I find their longitude, according to our drafts, to be one hundred and forty-one degrees fifty minutes. These islands having no particular names in the drafts, some or other of us made use of the seamen's privilege, to give them what names we please. Three of the islands were pretty large; the westernmost is the biggest. This the Dutchmen who were among us called the Prince of Orange's island, in honour of His present Majesty. It is about seven or eight leagues long, and about two leagues wide; and it lies almost north and south. The other two great islands are about four or five leagues to the eastward of this. The northernmost of them where we first anchored, I called the Duke of Grafton's Isle, as soon as we landed on it; having married my wife out of his Dutchess's family, and leaving her at Arlington house, at my going abroad. This isle is about four leagues long, and one league and a half wide, stretching north and south. The other great island our seamen called the Duke of Monmouth's island. This is about a league to the southward of Grafton Isle. It is about three leagues long and a league wide, lying as the other. Between Monmouth and the south-end of Orange Island, there are two small islands of a roundish form, lying east and west. The easternmost island of the two, our men unanimously called Bashee island, from a liquor which we drank there plentifully every day, after we came to an anchor at it. The other, which is the smallest of all, we called Goat island, from the great number of goats there; and to the northward of them all, are two high rocks.

Orange island, which is the biggest of them all, is not inhabited. It is high land, flat and even on the top, with steep cliffs against the sea; for which reason we could not go ashore there, as we did on all the rest.

I have made it my general observation, that where the land is fenced with steep rocks and cliffs against the sea, there the sea is very deep, and seldom affords anchor ground; and on the other side where the land falls away with a declivity into the sea,

(although

(although the land be extraordinary high within,) yet there are commonly good soundings, and consequently anchoring; and as the visible declivity of the land appears near, or at the edge of the water, whether pretty steep or more sloping, so we commonly find our anchor ground to be more or less deep or steep; therefore we come nearer the shore, or anchor farther off as we see convenient; for there is no coast in the world that I know, or have heard of, where the land is of a continual height, without some small valleys or declivities, which lie intermixt with the high land. They are the subsidings of valleys or low lands, that make dents in the shore and creeks, small bays and harbours, or little coves, &c. which afford good anchoring, the surface of the earth being there lodged deep under water. Thus we find many good harbours on such coasts, where the land bounds the sea with steep cliffs, by reason of the declivities, or subsidings of the land between these cliffs: but where the declension from the hills or cliffs is not within land, between hill and hill, but, as on the coast of Chili and Peru, the declivity is toward the main sea, or into it, the coast being perpendicular, or very steep from the neighbouring hills, as in those countries from the Andes, that run along the shore, there is a deep sea, and few or no harbours or creeks. All that coast is too steep for anchoring, and hath the fewest roads fit for ships of any coast I know. The coasts of Galicia, Portugal, Norway and Newfoundland, &c. are coasts like the Peruvian, and the high islands of the Archipelago; but yet not so scanty of good harbours; for where there are short ridges of land, there are good bays at the extremities of those ridges, where they plunge into the sea; as on the coast of Caraccos, &c. The island of John Fernando, and the island St. Helena, &c. are such high land with deep shore: and in general, the plunging of any land under water, seems to be in proportion to the rising of its continuous part above water, more or less steep; and it must be a bottom almost level, or very gently declining, that affords good anchoring. Ships being soon driven from their moorings on a steep bank: therefore we never strive to anchor where we see the land high, and bounding the sea with steep cliffs; and for this reason, when we came in sight of States Island near Terra del Fuego, before we entered into the south-seas, we did not so much as think of anchoring after we saw what land it was, because of the steep cliffs which appeared against the sea: yet there might be little harbours or coves for shallops, or the like, to anchor in, which we did not see or search after.

As high steep cliffs bounding on the sea have this ill consequence, that they seldom afford anchoring; so they have this benefit, that we can see them far off, and sail close to them, without danger; for which reason we call them bold shores: whereas low land on the contrary, is seen but a little way, and in many places we dare not come near it, for fear of running a ground before we see it. Besides there are in many places shoals thrown out by the course of great rivers, that from the low land fall into the sea.

This which I have said, that there is usually good anchoring near the low lands, may be illustrated by several instances. Thus on the south side of the bay of Campeachy, there is mostly low land, and there also is good anchoring all along shore; and in some places to the eastward of the town of Campeachy, we shall have so many fathom as we are leagues off from land; that is from nine or ten leagues distance till you come within four leagues: and from thence to land it grows but shallower. The bay of Honduras also is low land, and continues mostly so, as we pass along from thence to the coasts of Portobel, and Cartagena, till we came as high as Santa Martha; afterwards the land is low again, till you come towards the coast of Caraccos, which is a high coast and bold shore. The land about Surinam on the same coast is

low and good anchoring, and that over on the coast of Guinea is such also. And such too is the bay of Panama, where the pilotbook orders the pilot always to sound, and not to come within such a depth, be it by night or day. In the same seas from the high land of Guatemala in Mexico, to California, there is mostly low land and good anchoring. In the main of Asia, the coast of China, the bay of Siam and Bengal, and all the coast of Coromandel, and the coast about Malacca, and against it the island Sumatra on that side, are mostly low anchoring shores. But on the west side of Sumatra, the shore is high and bold; so most of the islands lying to the eastward of Sumatra; as the islands Borneo, Celebes, Gilolo, and abundance of islands of less note, lying scattering up and down those seas, are low land, and have good anchoring about them, with many shoals scattered to and fro among them; but the islands lying against the East Indian ocean, especially the west sides of them, are high land and steep, particularly the west parts, not only of Sumatra, but also of Java, Timor, &c. Particulars are endless; but in general it is seldom but high shores and deep waters; and on the other side, low land and shallow seas are found together.

But to return from this digression, to speak of the rest of these islands. Monmouth and Grafton isles are very hilly, with many of those steep inhabited precipices on them, that I shall describe particularly. The two small islands are flat and even; only the Bashee island hath one steep scraggy hill, but Goat island is all flat and very even.

The mould of these islands in the valley is blackish in some places, but in most red. The hills are very rocky: the valleys are well watered with brooks of fresh water, which run into the sea in many different places. The soil is indifferent fruitful, especially in the valleys; producing pretty great plenty of trees (though not very big) and thick grass. The sides of the mountains have also short grass, and some of the mountains have mines within them; for the natives told us, that the yellow metal they shewed us, (as I shall speak more particularly) came from these mountains; for when they held it up they would point towards them.

The fruit of the islands are a few plantains, bonanoes, pine-apples, pumpkins, sugar canes, &c. and there might be more if the natives would, for the ground seems fertile enough. Here are great plenty of potatoes and yams, which is the common food for the natives for bread kind: for those few plantains they have, are only used as fruit. They have some cotton growing here of the small plants.

Here are plenty of goats and abundance of hogs; but few fowls, either wild or tame. For this I have always observed in my travels, both in the East and West Indies, that in those places where there is plenty of grain, that is, of rice in one, and maiz in the other, there are also found great abundance of fowls; but on the contrary, few fowls in those countries where the inhabitants feed on fruits and roots only. The few wild fowls that are here are parakites, and some other small birds. Their tame fowl are only a few cocks and hens.

Monmouth and Grafton islands are very thick inhabited; and Bashee island hath one town on it. The natives of these islands are short squat people; they are generally round visaged, with low foreheads and thick eye-brows; their eyes of a hazel colour and small, yet bigger than the Chinese; short low noses, and their lips and mouths middle proportioned; their teeth are white, their hair is black and thick, and lank, which they wear but short; it will just cover their ears, and so it is cut round very even. Their skins are of a very dark copper-colour.

They wear no hat, cap, nor turbat, or any thing to keep off the sun. The men for the biggest part have only a small clout to cover their nakedness; some of them have

have jackets made of plantain leaves, which were as rough as any bear's skin : I never saw such rugged things. The women have a short petticoat made of cotton, which comes a little below their knees. It is a thick sort of stubborn cloth, which they make themselves of their cotton. Both men and women do wear large ear-rings, made of that yellow metal before mentioned. Whether it were gold or no I cannot positively say ; I took it to be so, it was heavy and of the colour of our paler gold. I would fain have brought away some to have satisfied my curiosity ; but I had nothing wherewith to buy any. Captain Read bought two of these rings with some iron, of which the people are very greedy ; and he would have bought more, thinking he was come to a very fair market, but that the paleness of the metal made him and his crew distrust its being right gold. For my part, I should have ventured on the purchase of some, but having no property in the iron, of which we had great store on-board, sent from England by the merchants along with Captain Swan, I durst not barter it away.

These rings when first polished look very gloriously, but time makes them fade, and turn to a pale yellow. Then they make a soft paste of red earth, and smearing it over their rings, they cast them into a quick fire, where they remain till they be red hot ; then they take them out and cool them in water, and rub off the paste ; and they look again of a glorious colour and lustre.

These people make but small low houses. The sides which are made of small posts, wattled with boughs, are not above four feet and a half high : the ridge-pole is about seven or eight feet high. They have a fire place at one end of their houses, and boards placed on the ground to lie on. They inhabit together in small villages built on the sides and tops of rocky hills, three or four rows of houses one above another, and on such steep precipices, that they go up to the first row with a wooden ladder, and so with a ladder still from every story up to that above it, there being no way to ascend. The plain on the first precipice may be so wide, as to have room both for a row of houses that stand all along on the edge or brink of it, and a very narrow street running along before their doors, between the row of houses and the foot of the next precipice ; the plain of which is in a manner level to the tops of the houses below, and so for the rest. The common ladder to each row or street comes up at a narrow passage left purposely about the middle of it ; and the street being bounded with a precipice also at each end, it is but drawing up the ladder if they be assaulted, and then there is no coming at them from below, but by climbing up as against a perpendicular wall ; and that they may not be assaulted from above, they take care to build on the side of such a hill, whose back-side hangs over the sea, or is some high, steep, perpendicular precipice altogether inaccessible. These precipices are natural ; for the rocks seem too hard to work on ; nor is there any sign that art hath been employed about them. On Bashee island there is one such, and built upon, with its back next the sea. Grafton and Monmouth isles are very thick set with these hills and towns ; and the natives, whether for fear of pirates or foreign enemies, or factions among their own clans, care not for building but in these fastnesses ; which I take to be the reason that Orange isle, though the largest, and as fertile as any, yet being level and exposed hath no inhabitants. I never saw the like precipices and towns.

These people are pretty ingenious also in building boats. Their small boats are much like our deal yalls, but not so big ; and they are built with very narrow plank, pinned with wooden pins, and some nails. They have also some pretty large boats, which will carry forty or fifty men. These they row with twelve or fourteen oars

of a side. They are built much like the small ones, and they row doubled banked; that is, two men sitting on one bench, but one rowing on one side, the other on the other side of the boat. They understand the use of iron, and work it themselves. Their bellows are like those at Mindanao.

The common employment for the men is fishing; but I did never see them catch much: whether it is more plenty at other times of the year I know not. The women do manage their plantations.

I did never see them kill any of their goats or hogs for themselves, yet they would beg the paunches of the goats that they themselves did sell to us: and if any of our surly seamen did heave them into the sea, they would take them up again and the skins of the goats also. They would not meddle with hogs-guts, if our men threw away any beside what they made chitterlings and sausages of. The goat-skins these people would carry ashore, and making a fire they would singe off all the hair, and afterwards let the skin lie and parch on the coals, till they thought it eatable: and then they would gnaw it and tear it in pieces with their teeth, and at last swallow it. The paunches of the goats would make them an excellent dish; they dressed it in this manner: they would turn out all the chopt grafs and crudities found in the maw into their pots, and set it over the fire, and stir it about often: this would smoke and puff, and heave up as it was boiling, wind breaking out of the ferment and making a very favoury stink. While this was doing, if they had any fish, as commonly they had two or three small fish, these they would make very clean (as hating nastiness belike) and cut the flesh from the bone, and then mince the flesh as small as possibly they could, and when that in the pot was well boiled they would take it up, and strewing a little salt into it they would eat it, mixed with their raw minced flesh. The dung in the maw would look like so much boiled herbs minced very small; and they took up their mess with their fingers as the Moors do their pillaw, using no spoons.

They had another dish made of a sort of locusts, whose bodies are about an inch and an half long, and as thick as the top of one's little finger; with large thin wings, and long and small legs. At this time of the year these creatures came in great swarms to devour their potatoe-leaves, and other herbs; and the natives would go out with small nets, and take a quart at one sweep. When they had enough, they would carry them home, and parch them over the fire in an earthen pan; and then their wings and legs would fall off, and their heads and backs would turn red like boiled shrimps, being before brownish. Their bodies being full would eat very moist, their heads would crackle in one's teeth. I did once eat of this dish, and like it well enough, but their other dish my stomach would not take.

Their common drink is water, as it is of all other Indians: besides which they make a sort of drink with the juice of the sugar-cane, which they boil, and put some small black sort of berries among it. When it is well boiled they put it into great jars, and let it stand three or four days and work; then it settles and becomes clear, and is presently fit to drink. This is an excellent liquor, and very much like English beer both in colour and taste. It is very strong, and I do believe very wholesome: for our men, who drank briskly of it all day for several weeks, were frequently drunk with it, and never sick after it. The natives brought a vast deal of it every day to those aboard and ashore: for some of our men were ashore at work on Bashee Island; which island they gave that name to from their drinking this liquor there; that being the name which the natives call this liquor by: and as they sold it to our men very cheap, so they did not spare to drink it as freely. And indeed from the plenty of this liquor, and their plentiful use of it, our men called all these islands the Bashee islands.

What language these people do speak I know not ; for it had no affinity in sound to the Chinese, which is spoke much through the teeth, nor yet to the Malayan language. They called the metal that their ear-rings were made of bullawan, which is the Mindanao word for gold ; therefore probably they may be related to the Philippine Indians ; for that is the general name for gold among all those Indians. I could not learn from whence they have their iron, but it is most likely they go in their great boats to the north end of Luconia, and trade with the Indians of that island for it. Neither did I see any thing beside iron and pieces of buffaloes' hide, which I could judge that they bought of strangers : their cloaths were of their own growth and manufacture.

These men had wooden lances, and a few lances headed with iron ; which are all the weapons that they have. Their armour is a piece of buffalo hide, shaped like our carter's frocks, being without sleeves, and sewed both sides together, with holes for the head and the arms to come forth. This buff-coat reaches down to their knees : it is close about their shoulders, but below it is three feet wide, and as thick as a board.

I could never perceive them to worship any thing, neither had they any idols ; neither did they seem to observe any one day more than another. I could never perceive that one man was of greater power than another, but they seemed to be all equal ; only every man ruling in his own house, and the children respecting and honouring their parents.

Yet it is probable that they have some law or custom by which they are governed : for while we lay here we saw a young man buried alive in the earth ; and it was for theft as far as we could understand from them. There was a great deep hole dug, and abundance of people came to the place to take their last farewell of him : among the rest there was one woman who made great lamentation, and took off the condemned person's ear-rings. We supposed her to be his mother. After he had taken his leave of her and some others he was put into the pit, and covered over with earth. He did not struggle, but yielded very quietly to his punishment ; and they crammed the earth close upon him, and stifled him.

They have but one wife, with whom they live and agree very well ; and their children live very obediently under them ; the boys go out a fishing with their fathers, and the girls live at home with their mothers ; and when the girls are grown pretty strong they send them to their plantations to dig hames and potatoes, of which they bring home on their heads every day enough to serve the whole family, for they have no rice nor maize.

Their plantations are in the valleys, at a good distance from their houses ; where every man has a certain spot of land which is properly his own. This he manageth himself for his own use, and provides enough that he may not be beholding to his neighbour.

Notwithstanding the seeming nastiness of their dish of goat's maw, they are in their persons a very neat cleanly people, both men and women ; and they are withal the quietest and civilest people that ever I did meet with. I could never perceive them to be angry with one another. I have admired to see twenty or thirty boats aboard our ship at a time, and yet no difference among them ; but all civil and quiet, endeavouring to help each other on occasion : no noise nor appearance of distaste ; and although sometimes cross accidents would happen, which might have set other men together by the ears, yet they were not moved by them. Sometimes they will also drink freely and warm themselves with their drink, yet neither then could I perceive them out of

humour. They are not only thus civil among themselves but very obliging and kind to strangers, nor were their children rude to us as is usual. Indeed the women, when we came to their houses, would modestly beg any rags or small pieces of cloth to swaddle their young ones in, holding their children out to us; and begging is usual among all these wild nations. Yet neither did they beg so importunately as in other places, nor did the men ever beg any thing at all; neither, except once at the first time that we came to an anchor, as I shall relate, did they steal any thing, but dealt justly and with great sincerity with us, and make us very welcome to their houses with *bashee* drink. If they had none of this liquor themselves they would buy a jar of drink of their neighbours, and sit down with us; for we could see them go and give a piece or two of their gold for some jars of *bashee*. And indeed among wild Indians, as these seem to be, I wondered to see buying and selling, which is not so usual, nor to converse so freely as to go aboard strangers' ships with so little caution, yet their own small trading may have brought them to this. At these entertainments they and their family, wife and children, drank out of small calabashes; and when by themselves they drink about from one to another, but when any of us came among them they would always drink to one of us.

They have no sort of coin, but they have small crumbs of the metal before described, which they bind up very safe in plantain-leaves, or the like. This metal they exchange for what they want, giving a small quantity of it, about two or three grains, for a jar of drink that would hold five or six gallons. They have no scales, but give it by guess. Thus much in general.

To proceed therefore with our affairs: I have said before that we anchored here the 6th day of August; while we were furling our sails there came near a hundred boats of the natives aboard with three or four men in each, so that our deck was full of men. We were at first afraid of them, and therefore got up twenty or thirty small arms on our poop, and kept three or four men as centinels, with guns in their hands, ready to fire on them if they had offered to molest us. But they were pretty quiet, only they picked up such old iron that they found on our deck, and they also took out our pump-bolts, and lynch-pins out of the carriages of our guns before we perceived them. At last one of our men perceived one of them very busy getting out one of our lynch-pins, and took hold of the fellow; who immediately bawled out, and all the rest presently leaped overboard, some into their boats, others into the sea, and they all made away for the shore. But when we perceived their fright we made much of him that was in hold, who stood trembling all the while; and at last we gave him a small piece of iron, with which he immediately leaped overboard and swam to his comforts, who hovered about our ship to see the issue; then we beckoned to them to come aboard again, being very loath to lose a commerce with them. Some of the boats came aboard again, and they were always very honest and civil afterward.

We presently after this sent a canoe ashore to see their manner of living, and what provision they had; the canoe's crew were made very welcome with *bashee* drink, and saw abundance of hogs, some of which they bought, and returned aboard. After this the natives brought aboard both hogs and goats to us in their own boats; and every day we should have fifteen or twenty hogs and goats aboard by our side. These we

brought on in jars, which we bought for old nails, spikes, and leaden bullets. Beside the fore-mentioned commodities they brought aboard great quantities of yams and potatoes, which we purchased for nails, spikes, or bullets. It was one man's work



to be all day cutting out bars of iron into small pieces with a cold chisel ; and these were for the great purchases of hogs and goats, which they would not sell for nails as their drink and roots. We never let them know what store we have, that they may value it the more. Every morning as soon as it was light they would thus come aboard with their commodities, which we bought as we had occasion. We did commonly furnish ourselves with as many goats and roots as served us all the day, and their hogs we bought in large quantities as we thought convenient, for we salted them. Their hogs were very sweet, but I never saw so many meazled ones.

We filled all our water at a curious brook close by in Grafton's Isle, where we first anchored. We stayed there about three or four days before we went to other islands. We sailed to the southward, passing on the east side of Grafton Island, and then passed through between that and Monmouth Island ; but we found no anchoring till we came to the north end of Monmouth Island, and there we stopped during one tide. The tide runs very strong here, and sometimes makes a short chopping sea. Its course among these islands is south by east and north by west. The flood sets to the north, and ebbs to the south, and it riseth and falleth eight feet.

When we went from hence we coasted about two leagues to the southward on the west side of Monmouth Island, and finding no anchor ground we stood over to the Bashee Island, and came to an anchor on the north-east part of it, against a small sandy bay, in seven fathoms clean hard sand, and about a quarter of a mile from the shore. Here is a pretty wide channel between these two islands, and anchoring all over it. The depth of water is twelve, fourteen, and sixteen fathoms.

We presently built a tent ashore to mend our sails in, and stayed all the rest of our time here, viz. from the 13th day of August till the 26th day of September ; in which time we mended our sails and scrubbed our ship's bottom very well, and every day some of us went to their towns and were kindly entertained by them. Their boats also came aboard with their merchandize to sell, and lay aboard all day ; and if we did not take it off their hands one day they would bring the same again the next.

We had yet the winds at south-west and south-south-west, mostly fair weather. In October we did expect the winds to shift to the north-east, and therefore we provided to sail, as soon as the eastern monsoon was settled, to cruise off Manila. Accordingly we provided a stock of provision : we salted seventy or eighty good fat hogs, and bought yams and potatoes good store to eat at sea.

About the 24th day of September the winds shifted about to the east, and from thence to the north-east, fine fair weather. The 25th it came at north, and began to grow fresh, and the sky began to be clouded, and the wind freshened on us.

At twelve o'clock at night it blew a very fierce storm. We were then riding with our best bower a-head, and though our yards and topmast were down yet we drove. This obliged us to let go our sheet-anchor, veering out a good scope of cable, which stopt us till ten or eleven o'clock the next day. Then the wind came on so fierce, that she drove again with both anchors a-head. The wind was now at north by west, and we kept driving till three or four o'clock in the afternoon : and it was well for us that there were no islands, rocks or sands in our way, for if there had we must have been driven upon them. We used our utmost endeavours to stop here, being loath to go to sea, because we had six of our men ashore, who could not get off now. At last we were driven out into deep water, and then it was in vain to wait any longer : therefore we hove in our sheet-cable and got up our sheet-anchor, and cut away our best bower. (for to have heaved her up then would have gone near to have foundered us,) and so put to sea. We had very violent weather the night ensuing, with very hard rain, and were



were forced to scud with our bare poles till three o'clock in the morning; then the wind slackened and we brought our ship to under a mizen, and lay with our head to the westward. The 27th day the wind abated much, but it rained very hard all day and the night ensuing. The 28th day the wind came about to the north-east, and it cleared up and blew a hard gale, but it stood not there, for it shifted about to the eastward, thence to the south-east, then to the south, and at last settled at south-west, and then we had a moderate gale and fair weather.

It was the 29th day when the wind came to the south-west; then we made all the sail we could for the island again. The 30th day we had the wind at west and saw the islands, but could not get in before night; therefore we stood off to the southward till two o'clock in the morning, then we tacked and stood in all the morning, and about twelve o'clock the 1st day of October we anchored again at the place from whence we were driven.

Then our six men were brought aboard by the natives, to whom we gave three whole bars of iron for their kindness and civility, which was an extraordinary present to them. Mr. Robert Hall was one of the men that was left ashore: I shall speak more of him hereafter. He and the rest of them told me, that after the ship was out of sight the natives began to be more kind to them than they had been before, and persuaded them to cut their hair short as theirs was, offering to each of them if they would do it a young woman to wife, and a small hatchet and other iron utensils fit for a planter in dowry; and withal shewed them a piece of land for them to manage. They were courted thus by several of the town where they then were; but they took up their head quarters at the house of him with whom they first went ashore. When the ship appeared in sight again they then importuned them for some iron, which is the chief thing that they covet, even above their ear-rings. We might have bought all their ear-rings, or other gold they had, with our iron-bars, had we been assured of its goodness; and yet when it was touched and compared with other gold we could not discern any difference, though it looked so pale in the lump; but the seeing them polish it so often was a new discouragement.

This last storm put our men quite out of heart: for although it was not altogether so fierce as that which we were in on the coast of China, which was still fresh in memory, yet it wrought more powerfully, and frightened them from their design of cruizing before Manila, fearing another storm there. Now every man wished himself at home, as they had done a hundred times before: but Captain Read, and Captain Teat the master, persuaded them to go towards Cape Comorin, and then they would tell them more of their minds, intending doubtless to cruize in the Red-Sea; and they easily prevailed with the crew.

The eastern monsoon was now at hand, and the best way had been to go through the streights of Malacca: but Captain Teat said it was dangerous, by reason of many islands and shoals there, with which none of us were acquainted. Therefore he thought it best to go round on the east side of all the Philippine Islands, and so keeping south toward the Spice Islands, to pass out into the East Indian Ocean about the island Timor.

This seemed to be a very tedious way about, and as dangerous altogether for shoals; but not for meeting with English or Dutch ships, which was their greatest fear. I was well enough satisfied, knowing that the farther we went the more knowledge and experience I should get, which was the main thing that I regarded; and should also have the more variety of places to attempt an escape from them, being fully resolved to take the first opportunity of giving them the slip.

CHAP. VI.—*They depart from the Bashee Islands, and passing by some others, and the North End of Luconia. — St. John's Isle, and other of the Philippines. — They stop at the two Isles near Mindanao; where they refit their Ship, and make a Pump after the Spanish Fashion. — By the young Prince of the Spice Islands they have News of Captain Swan and his Men, left at Mindanao. — The Author proposes to the Crew to return to him, but in vain. — The Story of his Murder at Mindanao. — The Clove Islands. — Ternate: — Tidore, &c. — The Island Celebes, and Dutch Town of Macassar. — They coast along the East Side of the Celebes, and between it and other Islands and Shoals with great Difficulty. — Shy Turtle. — Vast Cockles. — A wild Vine of great Virtue for Sores. — Great Trees: one excessively big. — Beacons instead of Buoys on the Shoals. — A Spout; a Description of them, with a Story of one. — Uncertain Tornadoes. — Turtle. — The Island Bouton, and its chief Town and Harbour Callafisung. — The Inhabitants. — Visits given and received by the Sultan. — His Device in the Flag of his Prow; his Guards, Habit, and Children. — Their Commerce. — Their different Esteem (as they pretend) of the English and Dutch. — Maritime Indians sell others for Slaves. — Their Reception in the Town. — A Boy with four Rows of Teeth. — Parakites. — Crocodores, a Sort of white Parrots. — They pass among other inhabited Islands. — Omba, Pentare, Timore, &c. — Shoals. — New Holland; laid down too much northward. — Its Soil, and Dragon Trees. — The poor winking Inhabitants: their Feathers, Habit, Food, Arms, &c. — The Way of fetching Fire out of Wood. — The Inhabitants on the Islands. — Their Habitations, Unfitness for Labour, &c. — The great Tides here. — They design for the Island Cocos, and Cape Comorin.*

THE 3d day of October 1687 we sailed from these islands, standing to the southward, intending to sail through among the Spice Islands; we had fair weather and the wind at west. We first steered south-south-west, and passed close by certain small islands that lie just by the north end of the island Luconia. We left them all on the west of us, and past on the east side of it and the rest of the Philippine Islands, coasting to the southward.

The north-east end of the island Luconia appears to be good champaign land, of an indifferent height, plain and even for many leagues; only it has some pretty high hills standing upright by themselves in these plains, but no ridges of hills or chains of mountains joining one to another. The land on this side seems to be moist savannah or pasture: the south-east part is more mountainous and woody.

Leaving the island Luconia, and with it our golden projects, we sailed on to the southward, passing on the east side of the rest of the Philippine Islands. These appear to be more mountainous and less woody till we came in sight of the island St. John, the first of that name I mentioned: the other I spake of on the coast of China; this I have already described to be a very woody island. Here the wind coming southerly, forced us to keep farther from the islands.

The 14th day of October we came close by a small low woody island, that lieth east from the south east end of Mindanao, distant from it about twenty leagues. I do not find it set down in any sea chart.

The 15th day we had the wind at north-east, and we steered west for the island Mindanao, and arrived at the south-east end again on the 16th day. There we went in and anchored between two small islands, which lie in about five degrees ten minutes north latitude: I mentioned them when we first came on this coast. Here we found a fine small cove on the north-west end of the easternmost island, fit to careen in or hale ashore;

so we went in there and presently unrigged our ship, and provided to hale our ship ashore to clean her bottom. These islands are about three or four leagues from the island Mindanao; they are about four or five leagues in circumference, and of a pretty good height. The mould is black and deep, and there are two small brooks of fresh water.

They are both plentifully stored with great high trees, and therefore our carpenters were sent ashore to cut down some of them for our use; for here they made a new boltspit, which we did set here also, our old one being very faulty. They made a new fore-yard too and a foretop-mast: and our pumps being faulty and not serviceable, they did cut a tree to make a pump: they first squared it, then sawed it in the middle, and then hollowed each side exactly. The two hollow sides were made big enough to contain a pump-box in the midst of them both when they were joined together; and it required their utmost skill to close them exactly to the making a tight cylinder for the pump-box, being unaccustomed to such work. We learned this way of pump-making from the Spaniards; who make their pumps that they use in their ships in the South Seas after this manner; and I am confident that there are no better hand pumps in the world than they have.

While we lay here, the young Prince that I mentioned before came on board. He understanding that we were bound farther to the southward, desired us to transport him and his men to his own island. He shewed it to us in our draft, and told us the name of it, which we put down in our draft, for it was not named there; but I quite forgot to put it into my journal.

This man told us, that not above six days before this, he saw Captain Swan and several of his men that we left there, and named the names of some of them, who he said were all well, and that now they were at the city of Mindanao; but that they had all of them been out with Raja Laut, fighting under him in his wars against his enemies the Alfoores; and that most of them fought with undaunted courage; for which they were highly honoured and esteemed, as well by the Sultan as by the general Raja Laut. That now Captain Swan intended to go with his men to Fort St. George, and that in order thereto, he had proffered forty ounces of gold for a ship; but the owner and he were not yet agreed; and that he feared the Sultan would not let him go away till the wars were ended.

All this the Prince told us in the Malayan tongue, which many of us had learned; and when he went away he promised to return to us again in three days time, and so long Captain Read promised to stay for him (for we had now almost finished our business), and he seemed very glad of the opportunity of going with us.

After this I endeavoured to persuade our men to return with the ship to the River of Mindanao, and offer their service again to Captain Swan. I took an opportunity when they were filling of water, there being then half the ship's company ashore; and I found all these very willing to do it. I desired them to say nothing till I had tried the minds of the other half, which I intended to do the next day, it being their turn to fill water then; but one of these men, who seemed most forward to invite back Captain Swan, told Captain Read and Captain Teat of the project, and they presently dissuaded the men from any such designs. Yet fearing the worst, they made all possible haste to be gone.

I have since been informed, that Captain Swan and his men stayed there a great while afterward; and that many of the men got passages from thence in Dutch sloops to Ternate, particularly Mr. Rofy, and Mr. Nelly. There they remained a great while,  
and

and at last got to Batavia (where the Dutch took their journals from them) and so to Europe; and that some of Captain Swan's men died at Mindanao, of which number Mr. Harthrope, and Mr. Smith, Captain Swan's merchants, were two. At last Captain Swan and his surgeon going in a small canoe aboard of a Dutch ship, then in the road, in order to get passage to Europe, were overset by the natives at the mouth of the river; who waited their coming purposely to do it, but unsuspected by them; where they were both killed in the water. This was done by the general's order, as some think, to get his gold, which he did immediately seize on. Others say, it was because the general's house was burnt a little before, and Captain Swan was suspected to be the author of it: and others say, that it was Captain Swan's threats occasioned his own ruin; for he would often say passionately, that he had been abused by the general, and that he would have satisfaction for it: saying also, that now he was well acquainted with their rivers, and knew how to come in at any time; that he also knew their manner of fighting, and the weakness of their country; and therefore he would go away, and get a band of men to assist him, and returning thither again, he would spoil and take all that they had, and their country too. When the general had been informed of these discourses, he would say, "What, is Captain Swan made of iron, and able to resist a whole kingdom? Or does he think that we are afraid of him, that he speaks thus?" Yet did he never touch him, till now the Mindanayans killed him. It is very probable there might be somewhat of truth in all this; for the captain was passionate, and the general greedy of gold. But whatever was the occasion, so he was killed, as several have assured me, and his gold seized on, and all his things; and his journal also from England, as far as Cape Corrientes on the coast of Mexico. This journal was afterwards sent away from thence by Mr. Moody (who was there both a little before and a little after the murder), and he sent it to England by Mr. Goddard, chief mate of the defence.

But to our purpose: seeing I could not persuade them to go to Captain Swan again, I had a great desire to have had the prince's company; but Captain Read was afraid to let his sickle crew lie long. That very day that the prince had promised to return to us, which was November 2, 1687, we sailed hence, directing our course south-west, and having the wind at north-west.

This wind continued till we came in sight of the island Celebes; then it veered about to the west, and to the southward of the west. We came up with the north-east end of the island Celebes the ninth day, and there we found the current setting to the westward so strongly that we could hardly get on the east side of that island.

The island Celebes is a very large island, extended in length from north to south about seven degrees latitude, and in breadth it is about three degrees. It lies under the equator, the north end being in latitude one degree thirty minutes north, and the south end in latitude five degrees thirty minutes south, and by common account the north point in the bulk of this island lies nearest north and south, but at the north-east end there runs out a long narrow point, stretching north-east, about thirty leagues; and about thirty leagues to the eastward of this long tip, is the island Gilolo, on the west side of which are four small islands close by it, which are very well stored with cloves. The two chiefest are Ternate and Tidore; and as the isle of Ceylon is reckoned the only place for cinnamon, and that of Banda for nutmegs, so these are thought by some to be the only clove-islands in the world; but this is a great error; as I have already shewn.

At the south end of the island Celebes there is a sea or gulph, of about seven or eight

eight leagues wide, and forty or fifty long, which runs up the country almost directly to the north; and this gulph hath several small islands along the middle of it. On the west side of the island, almost at the south end of it, the town of Macasser is seated. A town of great strength and trade, belonging to the Dutch.

There are great inlets and lakes on the east side of the island; as also abundance of small islands and shoals lying scattered about it. We saw a high peaked hill at the north end: but the land on the east side is low all along; for we cruised almost the length of it. The mould on this side is black and deep, and extraordinary fat and rich, and full of trees: and there are many brooks of water run out into the sea. Indeed all this east side of the island seems to be but one large grove of extraordinary great high trees.

Having with much ado got on this east side, coasting along to the southward, and yet having but little wind, and even that little against us, at south-south-west, and sometimes calm, we were a long time going about the island.

The twenty-second day we were in latitude one degree twenty minutes south, and being about three leagues from the island standing to the southward, with a very gentle land wind, about two or three o'clock in the morning we heard a clashing in the water, like boats rowing; and fearing some sudden attack, we got up all our arms, and stood ready to defend ourselves. As soon as it was day, we saw a great prow, built like the Mindanayan prows, with about sixty men in her; and six smaller prows. They lay still about a mile to windward of us, to view us; and probably designed to make a prey of us when they first came out; but they were now afraid to venture on us.

At last we shewed them Dutch colours, thinking thereby to allure them to come to us, for we could not go to them; but they presently rowed in toward the island, and went into a large opening; and we saw them no more: nor did we ever see any other boats or men, but only one fishing canoe, while we were about this island; neither did we see any house on all the coast.

About five or six leagues to the south of this place, there is a great range of both large and small islands, and many shoals also, that are not laid down in our drafts; which made it extremely troublesome for us to get through. But we past between them all and the island Celebes, and anchored against a sandy bay in eight fathoms sandy ground, about half a mile from the main island; being then in latitude one degree fifty minutes south.

Here we stayed several days, and sent out our canoes a striking of turtle every day; for here is great plenty of them; but they were very shy, as they were generally wherever we found them in the East India seas. I know not the reason of it, unless the natives go very much a striking here; for even in the West Indies they are shy in places that are much disturbed: and yet on New Holland we found them shy, as I shall relate, though the natives there do not molest them.

On the shoal without us we went and gathered shell-fish at low water. There were a monstrous sort of cockles: the meat of one of them would suffice seven or eight men. It was very good wholesome meat. We did also beat about in the woods on the island, but found no game. One of our men, who was always troubled with sore legs, found a certain vine that supported itself by clinging about other trees. The leaves reach six or seven feet high, but the strings or branches eleven or twelve. It had a very green leaf, pretty broad and roundish, and of a thick substance. These leaves pounded small and boiled with hog's lard make an excellent salve. Our men knowing the virtues of it stocked themselves here: there was scarce a man in the ship

but got a pound or two of it ; especially such as were troubled with old ulcers, who found great benefit by it. This man that discovered these leaves here, had his first knowledge of them in the Isthmus of Darien ; he having had his receipt from one of the Indians there : and he had been ashore in divers places since, purposely to seek these leaves, but did never find any but here. Among the many vast trees hereabouts there was one exceeded all the rest. This Captain Read caused to be cut down, in order to make a canoe, having lost our boats, all but one small one, in the late storms : so six lusty men, who had been logwood-cutters in the bays of Campeachy and Honduras (as Captain Read himself and many more of us had), and so were very expert at this work, undertook to fell it, taking their turn, three always cutting together ; and they were one whole day, and half the next before they got it down. This tree though it grew in a wood, was yet eighteen feet in circumference, and forty-four feet of clean body, without knot or branch : and even there it had no more than one or two branches, and then ran clear again ten feet higher ; there it spread itself into many great limbs and branches, like an oak, very green and flourishing : yet it was perished at the heart, which marred it for the service intended.

So leaving it, and having no more business here, we weighed and went from hence the next day, it being the 29th day of November. While we lay here we had some tornadoes, one or two every day, and pretty fresh land winds which were at west. The sea breezes are small and uncertain, sometimes out of the north-east, and so veering about to the east and south-east. We had the wind at north-east when we weighed, and we steered off south-south-west. In the afternoon we saw a shoal a-head of us, and altered our course to the south-south-east. In the evening at four o'clock we were close by another great shoal ; therefore we tacked, and stood in for the island Celebes again, for fear of running on some of the shoals in the night. By day a man might avoid them well enough, for they had all beacons on them, like huts built on tall posts, above high-water mark, probably set up by the natives of the island Celebes, or those of some other neighbouring islands ; and I never saw any such elsewhere. In the night we had a violent tornado out of the south-west, which lasted about an hour.

The thirtieth day we had a fresh land wind, and steered away south, passing between the two shoals, which we saw the day before. These shoals lie in latitude three degrees south, and about ten leagues from the island Celebes. Being past them, the wind died away, and we lay becalmed till the afternoon : then we had a hard tornado out of the south-west, and towards the evening we saw two or three spouts, the first I had seen since I came into the East Indies ; in the West Indies I had often met with them. A spout is a small ragged piece or part of a cloud hanging down about a yard, seemingly from the blackest part thereof. Commonly it hangs down sloping from thence, or sometimes appearing with a small bending or elbow in the middle. I never saw any hang perpendicularly down. It is small at the lower end, seeming no bigger than one's arm, but still fuller towards the cloud, from whence it proceeds.

When the surface of the sea begins to work, you shall see the water, for about one hundred paces in circumference, foam and move gently round till the whirling motion increases ; and then it flies upward in a pillar about one hundred paces in compass at the bottom, but lessening gradually upwards to the smallness of the spout itself there where it reacheth the lower end of the spout, through which the rising sea-water seems to be conveyed into the clouds. This visibly appears by the clouds increasing in bulk and blackness. Then you shall presently see the cloud drive along, although before it seemed to be without any motion ; the spout also keeping the same course with the cloud,

cloud, and still sucking up the water as it goes along, and they make a wind as they go. Thus it continues for the space of half an hour, more or less, until the sucking is spent, and then breaking off, all the water which was below the spout, or pendulous piece of cloud, falls down again into the sea, making a great noise with its fall and clashing motion in the sea.

It is very dangerous for a ship to be under a spout when it breaks, therefore we always endeavour to shun it, by keeping at a distance, if possibly we can. But for want of wind to carry us away, we are often in great fear and danger, for it is usually calm when spouts are at work; except only just where they are. Therefore men at sea, when they see a spout coming, and know not how to avoid it, do sometimes fire shot out of their great guns into it, to give it air or vent, that so it may break; but I did never hear that it proved to be of any benefit.

And now being on this subject, I think it not amiss to give you an account of an accident that happened to a ship once on the coast of Guinea, sometime in or about the year 1674. One Captain Records, of London, bound for the coast of Guinea, in a ship of three hundred tons, and sixteen guns, called the Blessing; when he came into the latitude seven or eight degrees north, he saw several spouts, one of which came directly towards the ship, and he having no wind to get out of the way of the spout, made ready to receive it by furling his sails. It came on very swift and broke a little before it reached the ship; making a great noise, and raising the sea round it, as if a great house or some such thing, had been cast into the sea. The fury of the wind still lasted, and took the ship on the starboard-bow with such violence, that it snapt off the bolt-sprit and fore-mast both at once, and blew the ship all along, ready to overset it, but the ship did presently right again, and the wind whirling round, took the ship a second time with the like fury as before, but on the contrary side, and was again like to overset her the other way. The mizen-mast felt the fury of this second blast, and was snapt short off, as the fore-mast and bolt-sprit had been before. The main-mast, and maintop-mast, received no damage, for the fury of the wind (which was presently over) did not reach them. Three men were in the fore-top when the fore-mast broke, and one on the bolt-split, and fell with them into the sea, but all of them were saved. I had this relation from M. John Canby, who was then quarter-master, and steward of her; one Abraham Wise was chief mate, and Leonard Jefferies second mate.

We are usually very much afraid of them: yet this was the only damage that ever I heard done by them. They seem terrible enough, the rather because they come upon you while you lie becalmed, like a log in the sea, and cannot get out of their way: but though I have seen, and been beset by them often, yet the fright was always the greatest of the harm.

December the 1st, we had a gentle gale at east-south-east, we steered south; and at noon I was by observation in latitude three degrees thirty-four minutes south. Then we saw the island Bouton, bearing south-west, and about ten leagues distant. We had very uncertain and unconstant winds: the tornadoes came out of the south-west, which was against us; and what other winds we had were so faint, that they did us little kindness; but we took the advantage of the smallest gale, and got a little way every day. The 4th day at noon I was by observation in latitude four degrees thirty minutes south.

The 5th day we got close by the north-west end of the island Bouton, and in the evening, it being fair weather, we hoisted out our canoe, and sent the Moskito men, of whom we had two or three, to strike turtle, for here are plenty of them; but they



being shy, we chose to strike them in the night (which is customary in the West Indies also); for every time they come up to breathe, which is once in eight or ten minutes, they blow so hard, that one may hear them at thirty or forty yards distance; by which means the striker knows where they are, and may more easily approach them than in the day, for the turtle sees better than he hears; but on the contrary, the manatee's hearing is quickest.

In the morning they returned with a very large turtle, which they took near the shore; and withal an Indian of the island came aboard with them. He spake the Malayan language; by which we did understand him. He told us, that two leagues farther to the southward of us, there was a good harbour, in which we might anchor: so having a fair wind, we got thither by noon.

This harbour is in latitude four degrees fifty-four minutes south; lying on the east side of the island Bouton, which island lies near the south-east end of the island Celebes, distant from it about three or four leagues. It is of a long form, stretching south-west and north-east above twenty-five leagues long, and ten broad. It is pretty high land, and appears pretty even, and flat and very woody.

There is a large town within a league of the anchoring place, called Callasufung, being the chief, if there were more; which we know not. It is about a mile from the sea, on the top of a small hill, in a very fair plain, incompassed with cocoa-nut trees. Without the trees there is a strong stone wall clear round the town. The houses are built like the houses at Mindanao; but more neat: and the whole town was very clean and delightful.

The inhabitants are small, and well shaped. They are much like the Mindanayans in shape, colour, and habit; but more neat and tight. They speak the Malayan language, and are all Mahometans. They are very obedient to the Sultan, who is a little man, about forty or fifty years old, and hath a great many wives and children.

About an hour after we came to an anchor, the Sultan sent a messenger aboard, to know what we were, and what our business. We gave him an account, and he returned ashore, and in a short time after he came aboard again, and told us, that the Sultan was very well pleased when he heard that we were English; and said, that we should have any thing that the island afforded; and that he himself would come aboard in the morning; therefore the ship was made clean, and every thing put in the best order to receive him.

The 6th day in the morning betimes a great many boats and canoes came aboard, with fowls, eggs, plantains, potatoes, &c. but they would dispose of none till they had orders for it from the Sultan, at his coming. About ten o'clock the Sultan came aboard in a very neat prow, built after the Mindanao fashion. There was a large white silk flag at the head of the mast, edged round with a deep red for about two or three inches broad, and in the middle there was neatly drawn a green griffon, trampling on awinged serpent, that seemed to struggle to get up, and threatened his adversary with open mouth; and with a long sling that was ready to be darted into his legs. Other East Indian Princes have their devices also.

The Sultan with three or four of his nobles, and three of his sons, sat in the house of the prow. His guards were ten musqueteers, five standing on one side of the prow, and five on the other side; and before the door of the prow-house stood one with a great broad sword and a target, and two more such at the after part of the house; and in the head and stern of the prow stood four musqueteers more, two at each end.



The Sultan had a silk turban, laced with narrow gold lace by the sides, and broad lace at the end : which hung down on one side the head, after the Mindanayan fashion. He had a sky-coloured silk pair of breeches, and a piece of red silk thrown cross his shoulders, and hanging loose about him ; the greatest part of his back and waist appearing naked. He had neither stocking nor shoe. One of his sons was about fifteen or sixteen years old, the other two were young things ; and they were always in the arms of one or other of his attendants.

Captain Read met him at the side, and led him into his small cabin, and fired five guns for his welcome. As soon as he came aboard he gave leave to his subjects to traffic with us ; and then our people bought what they had a mind to. The Sultan seemed very well pleased to be visited by the English ; and said he had coveted to have a sight of Englishmen, having heard extraordinary characters of their just and honourable dealing : but he exclaimed against the Dutch, (as all the Mindanayans, and all the Indians we met with do) and wished them at a greater distance.

For Macasser is not very far from hence, one of the chiefest towns that the Dutch have in those parts. From thence the Dutch come sometimes hither to purchase slaves. The slaves that these people get here and sell to the Dutch, are some of the idolatrous natives of the island, who not being under the Sultan, and having no head, live straggling in the country, flying from one place to another to preserve themselves from the Prince and his subjects, who hunt after them to make them slaves. For the civilized Indians of the maritime places, who trade with foreigners, if they cannot reduce the inland people to the obedience of their Prince, they catch all they can of them and sell them for slaves ; accounting them to be but as savages, just as the Spaniards do the poor Americans.

After two or three hours discourse, the Sultan went ashore again, and five guns were fired at his departure also. The next day he sent for Captain Read to come ashore, and he with seven or eight men went to wait on the Sultan. I could not slip an opportunity of seeing the place ; and so accompanied them. We were met at the landing place by two of the chief men, and guided to a pretty neat house, where the Sultan waited our coming. The house stood at the further end of all the town before-mentioned, which we past through ; and abundance of people were gazing on us as we past by. When we came near the house, there were forty poor naked soldiers with muskets made a lane for us to pass through. This house was not built on posts, as the rest were, after the Mindanayan way ; but the room in which we were entertained was on the ground, covered with mats to sit on. Our entertainment was tobacco and betel-nut, and young cocoa-nuts ; and the house was beset with men, and women and children, who thronged to get near the windows to look on us.

We did not tarry above an hour before we took our leaves and departed. This town stands in a sandy soil ; but what the rest of the island is I know not, for none of us were ashore but at this place.

The next day the Sultan came aboard again, and presented Captain Read with a little boy, but he was too small to be serviceable on board ; and so Captain Read returned thanks, and told him he was too little for him. Then the Sultan sent for a bigger boy, which the Captain accepted. This boy was a very pretty tractable boy ; but what was wonderful in him, he had two rows of teeth, one within another on each jaw. None of the other people were so, nor did I ever see the like. The Captain was presented also with two he-goats, and was promised some buffalo, but I do believe that they have but few of either on the island. We did not see any buffalo, nor many goats, neither have they much rice, but their chiefest food is roots. We bought here

about a thousand pound weight of potatoes. Here our men bought also abundance of crocodores, and fine large parakites, curiously coloured, and some of them the finest I ever saw.

The crocodile is as big as a parrot, and shaped much like it, with such a bill; but it is as white as milk, and hath a bunch of feathers on his head like a crown. At this place we bought a prow also of the Mindanayan make, for our own use, which our carpenters afterwards altered, and made a delicate boat fit for any service. She was sharp at both ends, but we sawed off one, and made that end flat, fastening a rudder to it, and she rowed and sailed incomparably.

We stayed here but till the 12th day, because it was a bad harbour and foul ground, and a bad time of the year too, for the tornados began to come in thick and strong. When we went to weigh our anchor, it was hooked in a rock, and we broke our cable, and could not get our anchor, though we strove hard for it; so we went away and left it there. We had the wind at north-north-east and we steered towards the south-east, and fell in with four or five small islands, that lie in five degrees forty minutes south latitude, and about five or six leagues from Callasung harbour. These islands appeared very green with cocoa-nut trees, and we saw two or three towns on them, and heard a drum all night, for we were got in among shoals, and could not get out again till the next day. We knew not whether the drum were for fear of us, or that they were making merry, as it is usual in these parts to do all the night, singing and dancing till morning.

We found a pretty strong tide here, the flood setting to the southward, and the ebb to the northward. These shoals, and many other that are not laid down in our drafts, lie on the south-west side of the islands where we heard the drum, about a league from them. At last we past between the islands, and tried for a passage on the east side. We met with divers shoals on this side also, but found channels to pass through; so we steered away for the island Timor, intending to pass out by it. We had the winds commonly at west-south-west and south-west hard gales and rainy weather.

The 16th day we got clear of the shoals, and steered south by east with the wind at west-south-west, but veering every half hour, sometimes at south-west and then again at west, and sometimes at north-north-west bringing much rain, with thunder and lightning.

The 20th day we passed by the island Omba, which is a pretty high island, lying in ~~the~~ eight degrees twenty minutes, and not above five or six leagues from the north-east part of the island Timor. It is about thirteen or fourteen leagues long, and five or six leagues wide.

About seven or eight leagues to the west of Omba, is another pretty large island, but it had no name in our plats; yet by the situation it should be that which in some maps is called Pentare. We saw on it abundance of smoaks by day, and fires by night, and a large town on the north-side of it, not far from the sea; but it was such bad weather that we did not go ashore. Between Omba and Pentare, and in the mid channel, there is a small low sandy island, with great shoals on either side; but there is a very good channel close by Pentare, between that and the shoals about the small isle. We were three days beating off and on, not having a wind, for it was at south-south-west.

The 23d day in the evening having a small gale at north, we got through, keeping close by Pentare. The tide of ebb here set out to the southward, by which we were helped through, for we had but little wind. But this tide, which did us a kindness in  
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setting us through, had like to have ruined us afterwards; for there are two small islands lying at the south-end of the channel we came through, and towards these islands the tide hurried us so swiftly, that we very narrowly escaped being driven ashore; for the little wind we had before at north dying away, we had not one breath of wind when we came there, neither was there any anchor-ground. But we got out our oars and rowed, yet all in vain: for the tide set wholly on one of these small islands, that we were forced with might and main strength to bear off the ship, by thrusting with our oars against the shore, which was a steep bank, and by this means we presently drove away clear of danger; and having a little wind in the night at north, we steered away south-south-west. In the morning again we had the wind at west-south-west, and steered south, and the wind coming to the west-north-west we steered south-west to get clear of the south-west end of the island Timor. The 29th day we saw the north-west point of Timor south-east by east, distant about eight leagues.

Timor is a long high mountainous island stretching north-east and south-west. It is about seventy leagues long and fifteen or sixteen wide, the middle of the island is in latitude about nine degrees south. I have been informed that the Portuguese do trade to this island; but I know nothing of its produce besides coire for making cables.

The 27th day we saw two small islands which lie near the south-west end of Timor. They bear from us south-east. We had very hard gales of wind, and still with a great deal of rain, the wind at west and west-south-west.

Being now clear of all the islands we stood off south, intending to touch at New Holland, a part of Terra Australis Incognita, to see what that country would afford us. Indeed as the winds were we could not now keep our intended course, which was first westerly and then northerly, without going to New Holland, unless we had gone back again among the islands: but this was not a good time of the year to be among any islands to the south of the equator, unless in a good harbour.

The 31st day we were in latitude thirteen degrees twenty minutes still standing to the southward, the wind bearing commonly very hard at west, we keeping upon it under two courses, and our mizen and sometimes a maintop-sail rift. About ten o'clock at night we tacked and stood to the northward, for fear of running on a shoal which is laid down in our drafts in latitude thirteen degrees fifty minutes, or thereabouts: it bearing south by west from the east end of Timor; and so the island bore from us by our judgments and reckoning. At three o'clock we tacked again, and stood south by west and south-south-west.

In the morning as soon as it was day, we saw the shoal right a-head: it lies in thirteen degrees fifty minutes by all our reckonings. It is a small spit of sand, just appearing above the water's edge, with several rocks about it, eight or ten feet high above water. It lies in a triangular form, each side being about a league and a half. We stemmed right with the middle of it, and stood within half a mile of the rocks, and sounded, but found no ground. Then we went about and stood to the north two hours; and then tacked and stood to the southward again, thinking to weather it, but could not; so we bore away on the north side, till we came to the east point, giving the rocks a small birth; then we trimmed sharp and stood to the southward, passing close by it, and sounded again, but found no ground.

This shoal is laid down in our drafts not above sixteen or twenty leagues from New Holland, but we did run afterwards sixty leagues due south before we fell in with it; and I am very confident, that no part of New Holland hereabouts lies so far northerly by forty leagues as it is laid down in our drafts. For if New Holland were laid down true,

true, we must of necessity have been driven near forty leagues to the westward of our course; but this is very improbable that the current should be so strong to the westward, seeing we had such a constant westerly wind. I grant that when the monsoon shifts first, the current does not presently shift, but runs afterwards near a month, but the monsoon had been shifted at least two months now: but of the monsoons and other winds, and of the currents, elsewhere in their proper place. As to these here, I do rather believe that the land is not laid down true, than that the current deceived us; for it was more probable we should have been deceived before we met with a shoal than afterwards; for on the coast of New Holland we found the tides keeping their constant course, the flood running north by east and the ebb south by east.

The 4th day of January 1688, we fell in with the land of New Holland in the latitude of 16 degrees fifty minutes, having, as I said before, made our course due south from the shoal that we past by the 31st day of December. We ran in close by it, and finding no convenient anchoring, because it lies open to the north-west, we ran along shore to the eastward, steering north-east by east, for so the land lies. We steered thus about twelve leagues; and then came to a point of land from whence the land trends east and southerly for ten or twelve leagues, but how afterwards I know not. About three leagues to the eastward of this point there is a pretty deep bay with abundance of islands in it, and a very good place to anchor in, or to hale ashore. About a league to the eastward of that point we anchored January the 5th, 1688, two miles from the shore in twenty-nine fathoms, good hard sand and clean ground.

New Holland is a very large tract of land. It is not yet determined whether it is an island or a main continent; but I am certain that it joins neither to Asia, Africa, nor America. This part of it that we saw is all low even land with sandy banks against the sea, only the points are rocky, and so are some of the islands in this bay.

The land is of a dry sandy soil, destitute of water, except you make wells, yet producing divers sorts of trees; but the woods are not thick, nor the trees very big. Most of the trees that we saw are dragon-trees as we supposed; and these too are the largest trees of any there. They are about the bigness of our large apple-trees, and about the same height, and the rind is blackish and somewhat rough; the leaves are of a dark colour; the gum distils out of the knots or cracks that are in the bodies of the trees. We compared it with some gum-dragon, or dragon's blood that was aboard, and it was of the same colour and taste. The other sort of trees were not known by any of us. There was pretty long grass growing under the trees, but it was very thin. We saw no trees that bore fruit or berries.

We saw no sort of animal nor any track of beast, but once; and that seemed to be the tread of a beast as big as a great mastiff dog. Here are a few small land birds, but none bigger than a black-bird, and but few sea fowls. Neither is the sea very plentifully stored with fish, unless you reckon the manatee and turtle as such; of these creatures there is plenty, but they are extraordinary shy, though the inhabitants cannot trouble them much, having neither boats nor iron.

The inhabitants of this country are the miserablest people in the world. The Hodmadods of Monomatapa, though a nasty people, yet for wealth are gentlemen to these; who have no houses and skin-garments, sheep, poultry, and fruits of the earth, ostrich eggs, &c. as the Hodmadods have: and setting aside their human shape, they differ but little from brutes. They are tall, strait-bodied and thin, with small long limbs. They have great heads, round foreheads, and great brows. Their eyelids are always half closed, to keep the flies out of their eyes: they being so troublesome here, that no fanning will keep them from coming to one's face, and without the assistance  
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of both hands to keep them off they will creep into one's nostrils and mouth too, if the lips are not shut very close; so that from their infancy being thus annoyed with these insects they do never open their eyes as other people: and therefore they cannot see far unless they hold up their heads, as if they were looking at somewhat over them.

They have great bottle-noses, pretty full lips, and wide mouths; the two fore-teeth of their upper jaw are wanting in all of them, men and women, old and young; whether they draw them out I know not; neither have they any beards. They are long visaged, and of a very displeasing aspect, having no one graceful feature in their faces. Their hair is black, short and curled, like that of the negroes, and not long and lank like the common Indians. The colour of their skins, both of their faces and the rest of their body, is coal-black, like that of the negroes of Guinea.

They have no sort of cloaths but a piece of the rind of a tree tied like a girdle about their waists, and a handful of long grass, or three or four small green boughs full of leaves, thrust under their girdle to cover their nakedness.

They have no houses, but lie in the open air without any covering: the earth being their bed and the heaven their canopy. Whether they cohabit one man to one woman, or promiscuously, I know not; but they do live in companies, twenty or thirty men, women, and children together. Their only food is a small sort of fish, which they get by making wares of stone across little coves or branches of the sea; every tide bringing in the small fish and there leaving them for a prey to these people, who constantly attend there to search for them at low water. This small fry I take to be the top of their fishery. They have no instruments to catch great fish should they come, and such seldom stay to be left behind at low water; nor could we catch any fish with our hooks and lines all the while we lay there. In other places at low water they seek for cockles, muscles, and periwinkles: of these shell-fish there are fewer still, so that their chiefest dependence is upon what the sea leaves in their wares; which be it much or little they gather up, and march to the places of their abode. There the old people that are not able to stir abroad by reason of their age, and the tender infants, wait their return; and what Providence has bestowed on them they presently broil on the coals, and eat it in common. Sometimes they get as many fish as makes them a plentiful banquet, and at other times they scarce get every one a taste; but be it little or much that they get every one has his part, as well the young and tender, the old and feeble, who are not able to go abroad, as the strong and lusty. When they have eaten they lie down till the next low water, and then all that are able march out, be it night or day, rain or shine, it is all one, they must attend the wares or else they must fast, for the earth affords them no food at all. There is neither herb, root, pulse nor any sort of grain for them to eat, that we saw; nor any sort of bird or beast that they can catch, having no instruments wherewithal to do so.

I did not perceive that they did worship any thing. These poor creatures have a sort of weapon to defend their ware, or fight with their enemies, if they have any that will interfere with their poor fishery. They did at first endeavour with their weapons to frighten us, who lying ashore deterred them from one of their fishing-places. Some of them had wooden swords, others had a sort of lances. The sword is a piece of wood shaped somewhat like a cutlass. The lance is a long straight pole sharp at one end, and hardened afterwards by heat. I saw no iron nor any other sort of metal; therefore it is probable they use stone-hatchets, as some Indians in America do, described in Chap. IV.

How they get their fire I know not, but probably as Indians do out of wood. I have seen the Indians of Bon-Airy do it, and have myself tried the experiment: they take a

flat piece of wood that is pretty soft and make a small dent in one side of it, then they take another hard round stick, about the bigness of one's little finger, and sharpening it at one end like a pencil, they put that sharp end in the hole or dent of the flat soft piece, and then rubbing or twirling the hard piece between the palms of their hands, they drill the soft piece till it smokes, and at last takes fire.

These people speak somewhat through the throat, but we could not understand one word that they said. We anchored, as I said before, January the 5th, and seeing men walking on the shore, we presently sent a canoe to get some acquaintance with them: for we were in hopes to get some provision among them; but the inhabitants seeing our boat coming, ran away and hid themselves. We searched afterwards three days in hopes to find their houses, but found none; yet we saw many places where they had made fire. At last, being out of hopes to find their habitations, we searched no farther, but left a great many toys ashore in such places where we thought that they would come. In all our search we found no water, but old wells on the sandy bays.

At last we went over to the islands, and there we found a great many of the natives: I do believe there were forty on one island, men, women, and children. The men at our first coming ashore threatened us with their lances and swords; but they were frightened by firing one gun, which we fired purposely to scare them. The island was so small that they could not hide themselves; but they were much disordered at our landing, especially the women and children, for we went directly to their camp. The lustiest of the women snatching up their infants ran away howling, and the little children run after squeaking and bawling, but the men stood still. Some of the women, and such people as could not go from us, lay still by a fire, making a doleful noise, as if we had been coming to devour them; but when they saw we did not intend to harm them, they were pretty quiet, and the rest that fled from us at our first coming returned again. This their place of dwelling was only a fire with a few boughs before it, set up on that side the wind was of.

After we had been here a little while, the men began to be familiar, and we clothed three of them, designing to have had some service of them for it, for we found some fountains of water here, and intended to carry two or three barrels of it aboard; but it being somewhat troublesome to carry to the canoes, we thought to have made these men to have carried it for us, and therefore we gave them some old cloaths: to one an old pair of breeches, to another a ragged shirt, to the third a jacket that was scarce worth owning; which yet would have been very acceptable at some places where we had been, and so we thought they might have been with these people. We put them on them, thinking that this finery would have brought them to work heartily for us; and our water being filled in small long barrels, about six gallons in each, which were made purposely to carry water in, we brought these our new servants to the wells, and put a barrel on each of their shoulders for them to carry to the canoe. But all the signs we could make were to no purpose, for they stood like statues, without motion, but grinned like so many monkeys, staring one upon another: for these poor creatures seem not accustomed to carry burdens, and I believe that one of our ship-boys of ten years old would carry as much as one of them. So we were forced to carry our water ourselves, and they very fairly put the cloaths off again, and laid them down, as if cloaths were only to work in. I did not perceive that they had any great liking to them at first, neither did they seem to admire any thing that we had.

At another time our canoe being among these islands seeking for game, espied a drove of these men swimming from one island to another; for they have no boats, canoes, or bark-logs. They took up four of them, and brought them on board; two

of them were middle-aged, the other two were young men about eighteen or twenty years old. To these we gave boiled rice, and with it turtle and manatee boiled. They did greedily devour what we gave them, but took no notice of the ship, or any thing in it, and when they were fet on land again, they ran away as fast as they could. At our first coming, before we were acquainted with them, or they with us, a company of them who lived on the main, came just against our ship, and standing on a pretty high bank, threatened us with their swords and lances, by shaking them at us. At last the captain ordered the drum to be beaten, which was done of a sudden with much vigour, purposely to scare the poor creatures. They hearing the noise, ran away as fast as they could drive; and when they ran away in haste, they would cry "gurry, gurry," speaking deep in the throat. Those inhabitants also that live on the main, would always run away from us; yet we took several of them. For, as I have already observed, they had such bad eyes, that they could not see us till we came close to them. We did always give them victuals, and let them go again, but the islanders, after our first time of being among them, did not stir for us.

When we had been here about a week, we haled our ship into a small sandy cove, at a spring-tide, as far as she would float; and at low water she was left dry, and the sand dry without us near half a mile; for the sea riseth and falleth here about five fathom. The flood runs north by east, and the ebb south by west. All the neap-tides we lay wholly aground, for the sea did not come near us by about a hundred yards. We had therefore time enough to clean our ship's bottom, which we did very well. Most of our men lay ashore in a tent, where our sails were mending; and our strikers brought home turtle and manatee every day, which was our constant food.

While we lay here, I did endeavour to persuade our men to go to some English factory; but was threatened to be turned ashore, and left here for it. This made me desist, and patiently wait for some more convenient place and opportunity to leave them than here, which I did hope I should accomplish in a short time; because they did intend, when they went from hence, to bear down towards Cape Comorin. In their way thither they designed also to visit the island Cocos, which lieth in latitude twelve degrees twelve minutes north, by our drafts; hoping there to find of that fruit; the island having its name from thence.



# OBSERVATIONS

ON

## THE PHILIPPINE ISLANDS AND THE ISLE OF FRANCE.

From the French of M. de GUIGNES,

Resident of France in China, attached to the Ministry of Foreign Relations, and Correspondent of the first and third Class of the Institute (Paris, 1808.)

### VOYAGE TO THE ISLE OF FRANCE, AND MANILA

ON my return from Pekin, finding myself perfectly at leisure, and being without news from Europe or the coast of India, and without expectancy of any commercial intercourse between the French and China was suspended by the war, I resolved on a voyage to the Isle of France, as well to obtain some knowledge of that colony, as to place myself in the way of visiting Manila also. I returned to China. This was indeed a circuitous voyage; but I was deficient of funds, and had been ever since 1793, and was induced to take this course as much by the hope of recruiting my finances as by the desire I have before expressed of seeing two important colonies.

I therefore embarked at Wampoo, on the 13th of January 1796, on board an American sloop of ninety-four tons, which sailed in company with five other vessels of the same nation, and on the 14th we passed Macao with a wind at first favourable and pleasant, but which, increasing gradually, at length terminated in a violent gale of several days' duration.

Notwithstanding the currents in the China seas run towards the west, we saw neither Pulo Sapate nor Pulo Condor, the first land we descried being Pulo Aor, which we doubled on the 22d. On the 24th we anchored under Munopin, and the next day entered the Straits of Banca by favour of the currents, which here run towards the south. On leaving these straits the six American vessels, keeping in a line, coasted along the western shore of Lucepara; when this island was brought to bear north we steered south by east and south by west for the Two Sisters, and large of certain Shoals on our starboard side.

On the 30th we anchored at North Island: we sailed thence on the 1st of February in hopes of clearing the Straits of Sunda the same day; but at the instant of our leaving the mouth of them a westerly wind sprang up, and blew with such violence as obliged us to seek shelter under Sambooricoo, where we were detained ten days.

The 12th, in the evening, we distinguished Christmas Island, of which in the night we were abreast: it is lofty towards the middle, well wooded, and of some extent. The wind did not shift to the south till the 18th of February; afterwards it blew from the south-south-east and south-east until our arrival off the island of Rodriguez, which







we got sight of the 14th of March. On part of the 15th we were becalmed; the 16th we descried the mountains of the Isle of France; and on the 17th anchored in the harbour, not indeed without difficulty, as the wind blew constantly from the south-east.

The Isle of France has a very picturesque appearance from the sea: it is wholly covered with mountains, the most remarkable of which are Pitrebot, or Pieter Both, and Le Pouce. The first derives its name from a Dutchman; and the second from the resemblance of a rock on the summit of the mountain to a thumb.

Mount Pitrebot, of the form of a sugar-loaf is surmounted by a rock in shape of an inverted cone, which at a distance has a singular effect. The rock appears of inconsiderable dimensions, although it is said to be sixty feet over at the top.

The mountains of the Isle of France are of slight elevation. M. de la Caille assigns them no more than four hundred and some few toises above the level of the sea\*. Those in the vicinage of the port are chiefly bare of trees. The surrounding territory is arid, and almost wholly covered with stones.

I remained on the Isle of France till the 17th of July, when I quitted it for Manila. We made Bourbon the next day at one in the afternoon; but our captain, who had never been at this island, apprehensive of passing Saint Denis, took in sail during the night, by which we lost ground prodigiously, and did not arrive at Saint Paul before the 21st in the afternoon. The next day we attempted to double Bourbon to windward; but being unable to effect our purpose, we passed on the opposite side, and lost sight of the island on the 23d, with a wind from the south-east. This wind continued until we had attained the twenty-seventh degree of southern latitude, when it veered to the north, and afterwards to the west and south-west by west, blowing with violence and with sudden gusts.

As we increased our latitude, and approached the twenty-eighth and twenty-ninth degrees, the wind began to slacken, blowing from the west, the west-north-west, and north-west till the 17th of August, when, having descended to the twenty-sixth and twenty-seventh degree, it blew from the south-west, south, and south-east, and finally, from the 20th to the 27th, we had east and north-east winds. Owing to these contrary gales, and the currents, we missed the Straits of Sunda, and on the 30th of August found ourselves before the Isle Engano (the Deceiving Isle).

We were now obliged to traverse in order to heighten our latitude, when having attained eight degrees south, and the wind beginning to be favourable we entered the Straits of Sunda on the 8th of September, and the next day anchored at Anières.

I noticed that the currents along the coast of Sumatra bear to the south-east, that is to say into the strait; but on quitting the coast their direction is west, north-west, and north-north-west. On this account it is imprudent to run too large on tacking, especially when about the middle of the strait; from not attending to this we were twice carried out of sight of land, notwithstanding we had proceeded so far as to be abreast of the Isle of Candy.

We left Anières on the 10th, and on the 14th entered the Straits of Banca. There we cleared on the 15th with a fine breeze from the south-east, which enabled us to stem the current, though it ran very strong.

\* The elevation of Pitrebot, according to L'Abbé de la Caille, is four hundred and twenty-four toises, or two thousand seven hundred and eleven English feet. The height of Le Pouce, according to St. Vincent (*Voyage aux Iles Afric*, tom. i. chap. 5.), exceeds that of Pitrebot, or any in the island.

The 18th, by four in the afternoon, we were abreast of Pulo Aor, the current running east.

The 22d we had sight of Pulo Condor, and on the 30th of Pulo Luban. On the night of this last day we anchored under Point Mirabel, having had the wind from our leaving the Straits of Sunda south-east, south, south-south-west, south-west, south, west, and south-west.

The 1st of October we hoisted sail at five in the morning, and passed between the Monja (the Nun) and the island of the Corregidor. La Monja is an insulated rock which has deep water very close to it. The island of the Corregidor, in front of the entrance of the bay of Manila, leaves but two passages into the bay, one on the north, the other on the south. On this island the Spaniards have constructed land-marks, and in the neighbourhood keep some guard-boats, one of which was dispatched to visit our vessel.

Making for the bay, we for some time kept to larboard to avoid the shoal of St. Nicholas; the sea ran high, but was placid from the instant we tacked to starboard to reach the port of Cavite. On entering, a fort is perceived on the point: this must not be approached too near, as the bottom rises, and we, for want of the precaution recommended on passing the fort, for an instant grounded.

As soon as we had anchored, the captain landed in order to make his declaration and request a search, as previous to this formality no one is allowed to quit the ship.

After six weeks stay at Manila, we quitted that city on the 15th of November, the wind blowing north-east.

During the monsoon of the north and north-east winds, in sailing for China, it is necessary to coast along Manila under favour of the land breeze, that from the east, which constantly blows at night; as in the day the north, north-north-west, or north-west winds, regularly prevail. It is likewise requisite that attention be paid not to keep at greater distance from the coast than a league, or at most two, as farther out the currents have a north-west direction, whereas within these limits their course is north.

From Point Caponès, towards and as far as Boulinao, the coast must not be neared too closely, that the shallows may be avoided, but thence as far as Cape Bojador, a vessel may keep in shore with safety: the currents in the first course run sometimes towards the south, and at others northward, but in the second constantly towards the north.

\* Scarcely had we doubled Cape Bojador before we experienced a very heavy swell, and had a violent gale from the north-east. We then steered north by west, in order to pass to leeward of the bank de la Plata, in latitude twenty degrees fifty-five minutes north.

The 26th we made the coast of China, and Pedra Blanca, an insulated white rock in the middle of the sea, situate, according to Sir Erasmus Gower, in latitude twenty-two degrees nineteen minutes north, longitude east of Paris one hundred and twelve degrees thirty-seven minutes\*. Mr. Dalrymple, in his chart of the coast of China, marks this rock as somewhat more towards the east.

On the 27th of November we anchored in Macao roads, the wind at first blowing hard from the north: it at length gradually abated and permitted our weighing, and reaching Canton. I remained in this city until the 28th January 1797, when I embarked

\* One hundred and fourteen degrees thirty-seven minutes east of Greenwich.

at Wampoo, on board the same American vessel which brought me to China, bound first for Manila; and thence for the Isle of France.

On the 31st we lost sight of the coast of China.

On the 4th of February we coasted along the shores of Manila, and had hopes of reaching the bay the same day, when, of a sudden, the wind fell, but rising again blew so hard that, after ineffectually endeavouring for several days to double the Corregidor by the northern passage, we were fain to seek shelter behind the mountain which forms Point Mirabel. The wind at length declining we steered to leeward of the island of the Corregidor, that is, by the southern passage, for the bay, where we made several long tacks in order to fetch the anchoring place; this we reached on the 11th of February.

### OBSERVATIONS ON THE PHILIPPINE ISLES.

OF the numerous colonies belonging to the Spaniards, as one of the most important, must indisputably be reckoned the Luçones (pr. Lufones), or Philippine Islands. Their position, their great fertility, and the nature of their productions, render them admirably adapted for active commerce; and if the Spaniards have not derived much benefit from them, to themselves and to their manner of trading is the fault to be ascribed.

Magellan, who left Seville the 10th of August 1519, and was killed on the island of Zebu, one of the Philippines, was the first European who made his appearance in this part of the world: He it was who secured the possession of these islands to the King his master, in right of discovery, but the Spaniards did not obtain sovereignty of them, in right of conquest, until 1564, under Lopez de Legaspe; at this epoch they gave to the Luçone Islands the name of the Philippines, although, according to some authors, they received this appellation much earlier, that is, when Lopez de Villalobes with his fleet visited them in 1543.

The Spaniards on their arrival at the Luçones found there several different races of people, and among them some Chinese. These last in 1603 would probably have wrested from them this important colony, but for the bravery and ability of Pedro Acugna, who resisted the efforts of that active and enterprising, but at the same time, unwarlike people. Since this attempt the Spaniards have tranquilly enjoyed possession of the Philippines; and if the cruizes, or unimportant attacks of those Moors be excepted, who inhabit some of the contiguous islands, maintain undisturbed peace with all the different inhabitants of this thickly studded Archipelago.

The Philippines extend from the sixth to nearly the twentieth degree of latitude north, and from the hundred and sixteenth to the hundred and twenty-sixth degree of longitude east of Paris\*.

Under the denomination of the Philippines a considerable number of islands are comprized; but as the detail of the whole of them would be tedious, I shall confine myself to a description of the larger only, and those most deserving attention.

The climate is hot and moist, yet, notwithstanding the islands are situate in the torrid zone, the heat is less considerable than might be imagined, on account of the sea breezes, and those from the land, which render it tolerable.

The soil is highly fertile, and the crops of rice and wheat are abundant.

Mines of gold exist, but these are not wrought; the only portion of this metal collected is that obtained in small grains washed down by the rivers. The islands are subject to earthquakes.

\* Paris is situate two degrees twenty minutes east of Greenwich.

The inhabitants differ as well in their origin as their language.

The *Tagales* are the progeny of Moors and Malays; on the arrival of the Spaniards they occupied the coasts of Manila. The *Bifayas*, or *Pintados* (painted men), come from Macassar, and are found on many of the islands. These two races are partly tributary, and apply themselves to commerce, the arts, navigation, and agriculture.

The indigenous inhabitants, or *Negrillos*, in no respect resemble the *Tagales* or *Bifayas*; they are much like the blacks of Guinea, are of lower stature, have hair curly and crisp, and go almost entirely naked; the women wear a piece of cloth round the body woven from the fibres of trees, and called *tapis*. These people, chiefly, live wild among the mountains, and are not tributary.

Some Chinese yet remain at Manila, but the number of them is greatly diminished since the year 1603.

The tribute paid by the Indians is fixed at ten reals for married couples, and five for each male unmarried, from the age of eighteen to sixty; females unmarried, twenty-four years old and under sixty, pay a like sum. The Indians who are tributary, and who, according to the enumeration made through the different provinces, form the twelfth part of the whole population, are reckoned to number three hundred thousand. The King receives but the third of the contribution of the Indians, the remainder being the property of certain lords possessing fiefs, or *encomiendas*, and thence denominated *encomendadores*. Proprietors moreover pay additionally two reals per head for the maintenance of the troops, and two more for the rector of the parish.

#### MINDANAO.

The site of this island is between six degrees thirty minutes and nine degrees forty-five minutes of northern latitude, and one hundred and twenty and one hundred and twenty-five degrees east of Paris. From east to west it measures ninety leagues, and is upwards of sixty from north to south\*; it has a number of bays and capes, the chief of the latter Sant Agustino, Suliago, and Sambooangue; it is watered by considerable rivers, among which are most distinguished the Buhayen, in the province of the same name; the Betuan, in the south; and the Sibuguey, in the province of Dapitan. It moreover contains two lakes; one of them of large dimensions in the south-east gives its name of Mindanao to the whole island; the other in the north-west is called Melanao.

The capital of Mindanao is situate in seven degrees twenty minutes north, yet notwithstanding its proximity to the line the heat is moderate, as it is tempered by the sea and land breezes. The atmosphere, during the prevalence of the eastern monsoons, is pure and serene; but when the western monsoon blows, tempests prevail with rain.

The soil is remarkably fertile, and produces in abundance rice, sugar, tobacco, and wild cinnamon gathered in the provinces of Sambooangue, Dapitan, and Cagayan. In its rivers gold is found; and sulphur about its volcanoes, of which in the island are several. On the coasts pearls are obtained, and a multitude of fish. The interior is full of mountains. The zoological inhabitants are horses, hogs, buffaloes, goats, wild-boars, stags, rabbits, monkeys, and abundance of fowls and pigeons; of reptiles and insects, vipers, scorpions, scolopendræ or millipeds, a species of venomous insect, and

\* According to the accompanying map, from east to west it measures two hundred and ninety-five English statute miles, one hundred and ninety-five at its greatest breadth in the east from north to south, and sixty in the west; its figure, allowing for indentations, would be that of an isosceles triangle, but for its being truncated at the western extremity. — TRANSLATOR.

in the rivers swarms of worms destructive to the bottoms of ships and boats which are not coppered.

The island is divided among five nations, the Mindanaos, Caragos, Lutaos, Dapitans, and Subanos. The Mindanaos occupy the southern part, which is the best and most fertile; the Dapitans and the Caragos dwell in the north-east; the Lutaos on the coasts and banks of rivers: these addict themselves to commerce and fishing; the Subanos are tributary to the last: fishermen like their masters, they reside in the western part of the island.

The houses are raised from the ground on posts, and are entered by means of a staircase; they consist but of one floor divided into different apartments: the walls, floors, ceiling, sides and partitions are made of cane; the roof is covered with palm-leaves. The inferior part below the house serves as a stable for cattle; it is also the receptacle of filth of all kinds, which is suffered to accumulate until carried away by the floods of the rainy season.

The island is subject to two Sultans, each of which has under him a zarabandal; who governs the people and holds them in a perfect state of vassalage. The Princes are termed Cahil, the nobles Tuam: these have rendered themselves independent. Such lords as have numerous vassals are denominated Otamayas.

The inhabitants are of middle stature, but well made, and of a tawny complexion inclining to a bright yellow: they possess intelligence, are industrious, and skilled in different works in wood and iron, although the number of their tools is small. They are passionately fond of dancing, entertainments, hunting and bathing. Their chief fault is idleness. The Mahometan is the predominant religion.

These people are friendly to strangers; but circumspection with them is very necessary, as they are lofty, savage, and revengeful.

The Mindanaos are treacherous; the Caragos, valiant; the Dapitans, brave and considerate: these last gave great assistance to the Spaniards on effecting their conquest of the island.

#### XOLO, OR JOLO \*, AND BASILAN.

Xolo and Basilan are dependent on Mindanao, and separately belong to the two Moorish Kings who govern the last described island.

Basilan is but little distant from Mindanao, and yields abundance of rice, sugar, and bananas. Its coasts abound in fish, and among them is the turtle. The island is watered by large rivers, and contains stags and wild boars.

Xolo, thirty leagues from Mindanao, lies under the sixth degree of latitude north, and is a rendezvous for the Moors, who much resort to this island to traffic. It yields pearls, ambergrease, and birds' nests, highly prized by the Chinese. These nests are constructed by a species of swallow, called in the country salangan.

#### BOHOL.

Bohol is situate under the tenth degree of latitude north, and may be ten leagues in length by a breadth of six †; it produces palm-trees, and some gold; the inhabitants are Tagales.

#### LEYTE.

\* X and J in the Spanish language are pronounced alike, the sound is a guttural aspirate unknown in English pronunciation, but resembling the  $\aleph$  of the Hebrews, the *ch* of the Scotch, in loch, and the *gh* of the Irish. — TRANSLATOR.

† Round, if an angular projection at the eastern and western extremity be excepted, this island is upwards of fifty miles from east to west, and forty from north to south. The remark is made from the chart.

## LEYTE.

This island extends from the tenth to the twelfth degree of latitude north. It is divided from north-west to south-east by lofty mountains, which occasion so sensible a difference in the climate, that on one side winter holds its sway, while the other enjoys fine summer weather. The air at Leyte is more refreshingly cool than at Manila.

The forests produce useful timber, and shelter and support a number of stags, buffaloes, and wild boars. The soil is remarkably fertile, and yields abundance of rice, pulse, and other vegetables; cotton and wax are likewise found in the island. The inhabitants are a gentle race, chiefly employed in the manufacture of cloths and in the fishery.

## PANAMAO.

Panamao lies north of Leyte, on which island it depends; it is reputedly sixteen leagues in circumference, is mountainous and well watered: among its productions are remarked quicksilver and sulphur.

## ZEBU.

This island, opposite to Leyte on the west, is the first of which the Spaniards made themselves masters; it is twenty leagues from north to south and about eighty \* in circumference: it exports an abundance of tobacco, cotton, wax, civet, and white hemp for cloths and cordage.

The small island of Matta, which lies opposite and at a short distance from Zebu, with that forms a safe shelter for shipping. On the south-east is another islet called Fuegos, the inhabitants of which are generous and brave.

## NEGROS.

West of Zebu the island Negros is a hundred leagues in circumference; it is rich, populous, and watered by numerous rivers which render it fertile. The governor resides in fort Iloilo, built on a cape fronting the island of Imaras; this last island is only ten leagues in circumference, and is separated from Panay by an arm of the sea, which serves as a port. In Panay are many Negrillos. The port of Saint Anne lies three leagues distant from Iloilo.

## CUYO.

Westward of Panay is the islet Cuyo; it is rich in all kinds of animals and fruit, and yields abundance of pulse, vegetables, and rice.

## PARAGOA.

This island, the most western of all the Philippines, is a hundred leagues in length by from twelve to fourteen in breadth. Its centre lies under the tenth degree of latitude

chart, and chiefly for the purpose of noticing that, although in the instance of Mindanao the French league of twenty to a degree is used, in the present the Spanish league of sixteen to a degree must be that referred to by our author. — TRANSLATOR.

\* There is an error either here or in the chart; the league is the Spanish league, sixteen to the degree, and the circumference should be stated fifty, Zebu being represented a long and narrow island. Eighty appears to have been placed by the printer for fifty. — TRANSLATOR.

north.



north. The Sultan of Borneo possesses the southern part of Paragoä, the south-eastern extremity of which is no more than twenty leagues distant from Borneo. The face of this island is mountainous; it is covered with wood, and abounds in animals. It yields wax in great plenty, but of grain a very slender quantity.

#### CALAMIANÈS.

The three Calamianès are situate north-north-east of Paragoä, and together with nine contiguous islets form one province of similar name. On these islands birds' nests are found, and wax; on the coasts pearls are fished. The inhabitants are remarkable for their gentle nature.

#### MINDORO.

This island, situate in thirteen degrees and some minutes of northern latitude \*, and on the south of Manila, is about seventy leagues in circuit †. Covered with towering mountains it yields little grain, but cocoa-nuts, and fruit in great plenty. The inhabitants who dwell on the coasts are mild and sociable; those of the interior a savage race.

#### MARINDÉQUE.

North-east of Mindoro, in thirteen degrees thirty minutes north, lies the island Marindéque. It consists of elevated land, productive of rice in small quantity, but abounding in fruit, especially cocoas: wax and pitch are likewise among its productions.

#### MASBATE.

The island of Masbate, north of Zebu, and under the twelfth degree of latitude north, is thirty leagues in circumference by eight in breadth. Its ports are safe and commodious, with excellent anchorage in deep water. Its produce wax, salt, civet, ambergrease, and gold.

#### TICAO.

North of Masbate, and eight leagues from the *emboradero*, or entrance of the strait of San Bernardino, lies the island Ticao. It has a good port to which vessels resort for refreshments. Most of the inhabitants live in a wild state.

#### CAPOUL.

This island is situate in twelve degrees thirty minutes north, near the mouth of the strait. It is only three leagues in circuit, but is nevertheless of importance, owing to its great fertility.

#### SAMAR, OR IBABAO.

Samar extends from eleven degrees thirty minutes to thirteen degrees of northern latitude. With Cape Baliquaton and the Point of Manila it forms the mouth of the strait of San Bernardino, through which the galeon passes, as well on leaving the Philippines, as on its return from Acapulco.

\* Where but one point of latitude and longitude of an island is marked, the center is meant to be expressed. — TRANSLATOR.

† The form of Mindoro is that of a triangle, the base running north-west by north and south-east by east, about one hundred and twenty English statute miles in length, the northern side one hundred miles long, that on the east seventy. The northern and south-western sides have each some bays, the northern a remarkable promontory about the middle; the eastern side forms a very regular line. — TRANSLATOR.

South-west of this island between Samar and Leyte is the strait of Juanillo, another passage of the Philippine Islands.

Samar is an island covered with mountains, but possessing vallies of great exuberance. Here it is the bean of St. Ignacius is grown; a fruit in high estimation with the Indians for its medical virtues, but the use of which the physicians of Europe consider dangerous.

In this island it is always cooler than at Manila, the air being continually refreshed by breezes from the ocean.

#### LUBAN AND AMBIL.

These are but islets. Luban is only five leagues in circumference, and Ambil still smaller \*: on the latter is a very lofty volcano. They yield wax, and a kind of black hemp.

#### BABUYANÈS AND BATANÈS.

These islets are situate about the nineteenth degree of latitude north. The nearest is subject to the Spaniards, and produces wax, ebony, cocoas, and bananas.

#### MANILA.

This island, the most considerable of the Philippines, stretches from latitude twelve degrees thirty minutes to eighteen degrees forty minutes north: it is upwards of one hundred and twenty leagues † long, by a various and very unequal breadth, being very narrow in certain parts, and in others from thirty to forty leagues broad.

It is divided into several provinces, that is to say, Balayan, Tayabas, Camarinès, Parecala, Cagayan, Illocos, Pangasinan, Pambangan, Bulacan, Bahi, and Manila; to these the island of Camadnanès being added, makes the whole number twelve.

Balayan lies on the western side at about the fourteenth degree north: it possesses two considerable bays Bambon and Batangas. The islands of La Casa, and the Corregidor are dependent on this province.

Tayabas is situate eastward of Balayan; on the south-east and north-east, it is washed by the sea. This province is of great extent and very populous.

Camarinès, south-east of Tayabas extends as far as to the strait of Samar. On its western shores is the port of Sorlocon of great extent and well adapted for building of ships. On its eastern side is the bay of Ailbay, near which is a lofty volcano.

Cantaduanès is an island ‡, east of the province of Camarinès in fourteen degrees north; it is thirty leagues in circuit, and forms of itself one province. It yields much rice, palm, oil, cocoa nuts, honey and wax; the inhabitants collect some gold from the rivers, and carry on a considerable traffic with Manila in boats: to remedy the inconvenience which the transport of these one by one would occasion, they build them of different sizes, and place the one successively within the other. The planks of which these boats are made are not joined together with nails, but are sewed or joined together with cane and rattans. The inhabitants of the island are warlike, and paint their faces.

Parecala || has mines of gold, and produces loadstone. The cacao tree and the palm yielding wine grow in this province: it has two bays, the one called Lampon, the other Mauban.

\* These islets, at the entrance of the straits of St. Bernardino, lie, Ambil north-east, and Luban south-west of Cape Baliquaton, each a few miles distant. — TRANSLATOR.

† French leagues, twenty to the degree.

‡ Nearly of oblong form, thirty-five English statute miles from north to south, transversely about twenty-five broad. — TRANSLATOR.

|| North of Tayabas, on the coast.

Cagayan extends along the eastern coast \* from the fifteenth degree to Cape Engano † in latitude eighteen degrees thirty minutes. This province though filled with mountains is nevertheless very fertile in rice; it also produces abundance of wax, a wood fit for dyeing called siboucao, and ebony, but this of a quality inferior to that of the isle of France. The inhabitants of the province are partly a wild race.

Illocos lies on the western coast of Manila ‡. This province is forty leagues in length from north to south, by a breadth of eight from east to west; it is watered by the river Bigan, and in the last is bounded by mountains peopled by savages, whose only traffick consists in bartering their gold for rice, tobacco, and other necessary articles: the province is rich, populous, and produces abundance of cotton.

Pangasinan is south of Illocos. Its mountains are covered with savages who carry on a traffick similar to that of their neighbours. In this province also is found the siboucao tree.

Pampangan, southward of the preceding, is extensive and fertile; it supplies Manila with an abundance of cattle and provisions, and likewise a great quantity of timber. The inhabitants are partly subject to the Spaniards, and partly independent savages.

Bulacan, south of Pampangan, is a province of no great extent; still does it yield abundance of rice, and from its palm-trees a large quantity of wine.

Bahi is an inconsiderable province, and remarkable only on account of a lake of the same name; this lake is about thirty leagues in circumference, and gives origin to the river Bahia, or Aro, which falls into the bay near the city of Manila. The Indians who dwelt on the banks of lake Bahi feed on immense bats, the extended wings of which measure from three to three and a half feet. The areca tree and that which bears the betel nut are found in this province.

#### CITY OF MANILA.

Manila, situate in latitude fourteen degrees thirty-six minutes eight seconds, north longitude east of Paris, one hundred and eighteen degrees thirty-one minutes fifteen seconds, is a city built on the banks of the river Bahia. Its figure is irregular, wide in the middle, but narrow at the two extremities. It is reputedly a league in circuit.

Gomez Perez de las Marinas, sent to govern the Philippines in 1590, was the first who erected fortifications about Manila. They are now in a good state; the walls are mounted with artillery, and the ditch and counter ditch are full of water: it has also some advanced works ||.

At

\* North of Parecala.

† The north-western promontory.

‡ At the northern extremity.

|| This city was founded June 24, 1571, by Miguel Lopez de Legaspi, a man famous throughout America for his bravery and conduct. He was appointed general of the expedition to the Philippines by the viceroy of New Spain under special authority from Philip II. and failed to make the conquest of them from the Port de la Natividad, now called Acapulco, on the 21st of September 1564. Philip empowered the viceroy to nominate the general and fit out the expedition, but under his own seal gave direction to an Augustin monk called Fray Andres de Urbaneta, to take charge of what regarded the navigation of the armament. This man, one of the first mathematicians and best sailors of his time, after serving in the army in Italy, had embarked for America, and held the rank of captain under Roafsa and Saavedra in their maritime expeditions, during which he acquired much practical knowledge respecting the Philippine islands. On his return thence to Mexico he resigned his employ, and entered the convent of Saint Augustin.

The expedition committed to the care of Urbaneta consisted of four hundred picked men, a number of monks, and an Indian interpreter, christened in Tidore by the name of George, at the time that island received the equipment of Villalobos. Complete success attended its efforts, which were seconded much by

At one of the extremities of the city, and in front of the bay, the Spaniards have erected Fort St. James. This fort defends the entrance of the river, and protects two jetties which advance into the sea at a distance from each other of nearly four hundred fathoms: they are cased with stone and kept in good condition; but, to render them of greater utility, they require to be prolonged, especially that on the southern side; indeed it might be well to continue them to the bar, as in that case it would be an easy matter to deepen the channel, and render it safe of passage for ships as well as the country coasters, which at present run a risk of grounding, and are fearful of attempting to pass it when the wind is anywise high. The sea is generally rough on the bar, on which even at height of tide there is scarcely twelve feet water.

Manila has six gates, those of Los Almacenes, Santo Domingo, Parian, Sta. Lucia, La Puerte Reale, and a postern.

The city is handsome, and airy; the streets mostly straight: the governor has caused them to be paved with granite from China, and to be lighted with lamps, so that passengers may walk them in safety by night as well as by day.

The houses consist of but one story above the ground-floor. The lower part is built of stone and vaulted; the walls of great thickness. The upper part is of wood covered with plaister. The roof is supported by thick posts, placed upright, and resting on the inferior walls, in which they are inserted. These posts are connected by the beams which sustain the roof, and the whole is strongly joined together with pegs, so that when earthquakes happen they play without disjoining: but as the apartments are not cieled, the sight of the skeleton of the building has a very disagreeable effect.

The rooms are spacious and but slightly furnished; they do not receive the light directly from without, but communicate by doors with galleries of wood which surround the house, and have large windows formed of transparent shells, the halves of which slide one over the other. This contrivance is excellent for introducing a coolness into the apartments, but externally offends the eye.

The public edifices and churches are solidly constructed; the belfrys in particular are very massive. The cathedral is of great size; attached to it is an archbishop and twelve canons. Manila was erected into a bishop's see in 1581, and was afterwards in 1595 raised to the dignity of an archbishopric. The suffragans of the metropolitan are the three bishops of Zebu, Nueva Caceris and Nueva Segovia.

The government-house is large, but presents nothing extraordinary. The square in front is spacious and regular; the governor has planted it with trees and furnished it with lamps. The embellishment has certainly a fine effect, though a more fit appropriation of the square would certainly have been to have made it a parade for troops.

by the conciliating measures of the general, and the persuasions of the missionaries; and after finding the first town in the island of Zebu, which from his own name he called San Miguel Legaspi, in June 1565 sent back the commodore's ship with Father Urbaneta, as previously concerted with the viceroy. Urbaneta happily arrived at Acapulco, after a voyage of four months, and on his arrival produced a very circumstantial account of his course, together with a much esteemed and very exact journal, which afterwards formed an excellent guide for the navigation between Acapulco and Manila.

It was not until after he had subdued and pacified the chief island, that of Luzon, that Legaspi founded Manila, made numerous wise regulations for the division of property, and administration of justice, and declared the city to be the metropolis of New Castile, the name he gave to this region. *Establecimientos Ultramarinos de las Naciones Europeanas*, per Edvardo Malo de Laque. Tomo v. pag. 197. et seq. Madrid, 1790.—TRANSLATOR.

At Manila convents occupy at least one third of the city. The Jesuits had formerly two churches here, those of St. Ignacius and Saint Joseph; these are still highly decorated. The Dominicans have two colleges, and the Augustines a convent. There is also a convent of St. Clare for forty nuns, and a house termed the monastery of Mercy, destined for female orphans of Spaniards as well as of Creoles. These orphans ultimately receive a bounty if they become nuns, and a portion if they marry.

On leaving the city a bridge presents itself, built in part of stone in part of wood; it is wide enough to admit of two carriages abreast, and serves to join the city and the different suburbs; there are twelve in number, to wit: Parian, Minondo, Sta Cruz, Ila San Michael, San Sebastian, Bagumbaya, San Jago Ntra, Sra del Eremito, Tondo, Malati, and Chiapo.

Parian, which fronts the city, is reckoned the most considerable; it has several streets, and is inhabited by Chinese, called Sangleyes, who all of them are artisans, smiths, or merchants; the number at present is three thousand. It was vastly more considerable in 1603, but at that epoch twenty thousand perished\*. A very strict watch is kept over these Chinese: an alcalde and a number of Spanish officers have the superintendence of the police, and exact from them, as is said, considerable sums of money, chiefly at the new year. The simple license of playing at metooa (odd or even) being purchased by them at the rate of ten thousand dollars.

Minondo and Sta. Cruz are inhabited by Spaniards and Indians. The Spaniards, whose houses are constructed in the same style as those of Manila, prefer a residence in these two suburbs, on account of enjoying greater freedom, as the gates of the city are closed at an early hour: as for the Indians, their dwellings are raised on posts, the walls are of plaster or matting, and the roof is covered with the leaves of the palm. This mode of building is ungrateful to the eye, but it secures the inhabitants of such dwellings from injury, by floods or earthquakes.

San Sebastian likewise has some good houses. In this suburb is a long causeway raised by the government, as a promenade for the inhabitants; hither especially the ladies of Manila resort much in their carriages. The Chinese are said to have defrayed the expence of making this mall with money extorted from them for exemption from some obstructions purposely ordained by the Spaniards: the mall is pleasant, is shaded by a number of areka trees, and commands a fine prospect over the country.

Tondo is the most northern of the different suburbs; formerly it was a small town: its church was the first constructed by the Spaniards in this country.

A number of canals divide these different suburbs, and greatly facilitate the transport of merchandize.

The country about Manila is remarkably fine; the soil appears to be very rich; it is flat at first, but afterwards rises gradually. The villages are commonly surrounded by trees, and the beauty of the prospect would be greatly heightened were the houses less wretched. In every village is a stone church, as well as a parsonage-house, for the rector, who is constantly one of the monks. These last, who all of them are Europeans, are very much respected by the Indians; while the secular clergy, who most commonly are Creoles, are held in contempt: hence the government shews great deference to the rectors; for, generally speaking, the Indian always consults them on entering upon any enterprize, and even as to paying his taxes. The monks who

\* Previous to the insurrection and subsequent slaughter of the Chinese in 1603, by Acuna, the suburb of Parian contained 30,000 Sangleyes.—Ed. Malo de Luque *Hist. Polit. de los Estab. Ultr. &c.* Tom. vi. p. 203, Madrid. 1790.

officiate in the different parish churches are the Augustins, Franciscans, and bare-footed Carmelites.

On ascending the river from the town, a number of country houses are seen on its banks, with each a bath on the margin of the river inclosed with matting. To these during the prevalence of hot weather the wealthy inhabitants of Manila much resort : both men and women bathe together, but for the sake of decency the men wear drawers, and the women a wide shift.

Two miles above the town is the royal hospital. On advancing higher some old houses are seen almost level with the ground ; for the English after taking Manila, not being able to quit the city without exposing themselves to be shot by the Indians, entrenched in these dwellings, to remedy the inconvenience reduced them to the state in which they have continued to the present time.

The garden of the Philippine Company is likewise out of the town ; it is much neglected, and no longer exhibits any of the rare trees or plantations of mulberries it once possessed. In the midst a monument, resembling a fountain more than a mausoleum, is erected in memory of Mr. Pineda, who died in the expedition of M. de Malespina : it is surrounded by four enormous termini, works surely of no utility in a garden.

At some distance from Malati, a village situate near the bay, and a league distant from Manila, the Spaniards have constructed a *polverista*, or powder magazine. This little fort is in a very unfit position ; for, being too far from the town to be succoured, it could readily be taken by an enemy who should effect a descent, to whom it would be of considerable service.

Mr. D'Aguilar, a governor of the Philippines when I was there, being apprehensive of an attack on the part of the English, caused a canal to be cut from near the *polverista* communicating with the river, so as to allow gun-boats to enter the bay, and leave it without danger, or to seek shelter under the jetties which protect the entrance. In constructing the canal \* the wild palm was used (*palma brava*) : the wood of this tree is hollow, hard, tough, and very durable in water : it is likewise used for making the gutters which surround the houses, and conduct the rain water into the cisterns, with which almost every house in Manila is provided.

#### PORT OF CAVITE.

This port lies three leagues south of Manila. Vessels take refuge in it during the south west monsoon ; and return to anchor in front of the city in the season when winds from the north and north-east are prevalent.

The town of Cavite is small, and stands on a tongue of land ; it has but one suburb, called San Roch. The fort is built at the extremity of the town ; it is weak, and could not hold out against a vessel of war. In doubling the point, attention should be paid not to keep too near, as there is a shoal in its vicinage. The Spaniards have an arsenal at Cavite, and here it is that large merchant ships are built.

#### BAY OF MANILA.

The Bay of Manila, being every way eight leagues over, the depth of it is likewise great. The margin is partly covered with wood, and partly with villages. The island of the Corregidor is at the entrance of the bay ; hence it is that signals are made on

\* Probably for supporting the banks.

vessels coming in sight. The Spaniards have erected no battery on the island, lest the English should make themselves masters of it to their prejudice.

The bay is entered by the passages on either side of the island; but that on the south between Pulo Cavallo and the main is the broadest, and has a smoother sea even during the prevalence of the north-east winds, than the north passage, which from Point Mirabel to the island of the Corregidor, is scarcely a league across. The sea being deep in this part, vessels frequently prefer it; but the winds here blow violently, and when the summits of the mountains are seen capped with clouds it is especially to be avoided. The rocks called *puercos* (hogs) which are off Point Tagale, and which advance some distance into the sea, are likewise to be shunned.

La Monja may be neared pretty close, as may El Fraile, but Pulo Cavallo on the north has some reefs. In order effectually to protect the bay, it is essential the Spaniards should erect batteries and redoubts on all the advanced points, as well of the main as of the contiguous islets, and in addition, have a flotilla of gun-boats constantly equipped near the island of the Corregidor. In the present state of the bay, nothing prevents a squadron from entering it and casting anchor in front of Manila, almost as soon as its arrival could be known.

A guarda-costa, it is true, is placed before Manila, but is there of no utility whatever; for when we entered the bay this vessel was unable to come up with us, though we had only our topsails up; nay, we were even obliged to take in every sail before she could overtake us.

There is plenty of water in every part of the bay, except on the bank of San Nicholas, the extent of which is not so great as laid down by Mr. D'Après; it may be passed either in the north or the south; but the latter during the south-west monsoon is preferable; the swell on this side is less considerable, the wind less violent, and the shore may be neared without apprehension, as there is deep water. We made a number of tacks in the bay of Manila, and ascended as high as to its northern extremity; the only caution requisite is, not to approach the shore nearer than three quarters of a league. Vessels anchor without the port of Manila at three quarters of a league distance, and beyond the bar: this also is the anchorage for such vessels as having entered the river cannot pass over the bar with their whole cargo on board.

#### *Inhabitants of Manila.*

The population of the city of Manila is reckoned to amount to three thousand, of whom such as are of any note never leave the house but in a carriage. The governor is drawn by six horses and is preceded by several men on horseback. When he passes it is customary for others to halt. The procurator-fiscal, the auditors, the King's lieutenant, and the bishop, have four horses to their carriage: individuals are allowed but two. Postillions stand in lieu of coachmen. The carriages generally come from Bengal, but some are built at Manila on the model of English ones. The maintenance of an equipage is far from costly; a pair of horses may be hired for twenty or thirty dollars per month, and their keep, with the wages of the coachman, amounts but to six or eight dollars more.

The lady of the governor, and some other ladies of distinction, alone dress in the

petticoats are short; they wear stays with busks, and the heels of their shoes are very high. Round the neck, almost universally, a chain of gold is worn, to which a medallion is



suspended, containing relics. The men dress better, but have something affected in their manner.

The wife has the whole management of domestic affairs, the only business of the husband being to furnish money, which he fetches from the *bodega* or magazine; when one bag of a thousand dollars is emptied, the wife applies for another.

The diversions of Manila are few; the different circles meet in the evening. Society is on a dull and distant footing; the young ladies sing and play on the piano: the women are generally seated on one side, and the men on the other.

The women have a shrill voice, and sing from the throat; they all smoke; the cigars for the women are about five or six inches long, and thick as a good sized finger.

At Manila, I was present at several balls, among others at that given by Mr. Avala, commandant of the marine service. The governor, his wife, and all the people of distinction in the city were invited. The archbishop and the grand vicar were there, but kept themselves in an apartment adjoining that in which the ball was held. Country dances, minuets, and even the fandango, but in a very modest manner, were danced. Voleros also, after the manner of the Spaniards, were sung, airs which to me seemed very pleasing.

The women in private houses likewise dance minuets, but in a manner somewhat singular, blending with them occasionally some steps of the fandango: in general they appear but little accustomed to this dance, for the minuets would last through the night, were the dancers not admonished of the time to conclude. I shall not describe the dances of the Creoles, and some Spaniards in private: they are lascivious in extreme.

Being invited to a ball in a Spanish house, I saw that attention had been paid to cover a Christ at the bottom of the hall in which the dancing was. The rector of the parish presented himself to see the dancing, but stood without the door. On all these occasions a great quantity of sweetmeats, pastry, and cooling beverages are consumed.

The complexion of the Spaniards born at Manila is slightly tawny, but those born in Europe preserve their natural colour. Both the one and other are of excellent disposition, civil and obliging; and, during my residence at Manila I had every reason to be satisfied with the treatment I experienced: of the governor Mr. Aquilar I must say the same, as well as of the other gentlemen in office, whose kindness on several occasions I have to acknowledge.

The Indians are ugly, and resemble the Malays; their stature is of the middle size, and their complexion tawny; of the women no better can be said. The dress of the men is a shirt, pantaloons, a hat and slippers; the beaux among them in addition wear a black jacket, with a handkerchief in each pocket, a third round the neck, and a fourth in the hand. These handkerchiefs come from Madras, and as they are afterwards embroidered at Manila they are very costly. The Indians smoke cigars four or five inches long, and thick as the little finger.

The female Indians wear a half shift and petticoat, and wrap round them moreover a long and narrow piece of stuff called tupis made of the fibres of the banana tree. Their shoes are very small, and frequently the little toe is left out of the shoe. Their hair is turned up, and knotted at the back of the head: at times these women go wholly enveloped in a large black cloak reaching to the ground, from the neck of which two small and narrow bands hang down over each shoulder.

The shirouts or cigars of the Indian ladies and Creoles are a foot in length, by an inch and a half in diameter, and are calculated to last for a fortnight; so large are they in short that, in order to put them in the mouth, they require flattening.

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The Indians, in common with all Malays, are passionately fond of cock-fighting, but they are not permitted to indulge at pleasure this inclination. An Indian rarely walks out without a cock, and as soon as he meets another Indian with one under his arm, the two birds are set down and immediately engage; but battles with steel spurs are only permitted in a place formed for the purpose, which is farmed from the King at a rent of twenty or twenty-five thousand dollars: here the Indians assemble, and frequently bet on their favourite cocks the whole of what they are worth. The fate of the gamesters is soon decided, for the cocks being armed with sharp spurs, one or the other is killed almost in an instant.

The Indians at Manila follow all kinds of trades and fill every employ; they are merchants, artisans, labourers, coachmen, lacqueys, and porters; and are skilful in managing boats.

The Chinese also follow different occupations, but prefer such as require more ingenuity; for example, they are the goldsmiths, smiths, gardeners, &c. They are permitted to marry; their wives work as well as themselves, but lay aside their gains; and should the husband, after making a fortune, choose to leave the country to return home, he leaves a part of his property with his wife, who retains and brings up the children.

The Chinese who inhabit Manila profess Christianity, but this only for form's sake; for when they leave the Philippines they throw their images and chaplets into the sea, and cease to be Christians as soon as they lose sight of Mirabel point.

Meat and provisions in general are cheap and abundant at Manila; the fish caught in the bay is good, but that taken on the bar and near the dykes is heavy of digestion, owing to its feeding on the filth washed down by the river. Generally, in the city and suburbs cistern water is drunk; each house has its reservoir, which is replenished with rain-water by means of gutters and pipes: those solicitous of spring water are obliged to fetch it from Sta. Anna. The city lacks mills; but the governor who ruled in 1797, and whose whole attention was devoted to the means of improving the colony, had sent for a Genevese mechanic from Canton, purposely to attempt the structure of some upon the river.

#### *Boats.*

On the river and along the shores of the bay a number of boats are seen, very sharply built, and furnished with yards, which serve as balances, on the windward end of which, when it blows hard, the sailors place themselves to counterpoise the effect of the wind on the sail: this contrivance however does not always insure safety, for at times the bamboo which forms the balance beam-breaks, in which case the boat founders, and the crew are lost. The river is crossed in small boats called pangues, made of the hollowed trunk of a tree; these generally will contain but two or three persons, though some larger built are capable of accommodating from twelve to fifteen: they are propelled with oars, and sail lightly through the water.

#### *Temperature.*

Manila enjoys a healthy air; still to me it appeared rather heavy, a quality to be attributed to the quantity of moisture it contains, owing to the heated vapours which rise from the large surface of water formed by the inundation of the low grounds in the rainy season, and to the ungrateful exhalations from the muddy strand in front of Tondo, which is constantly bare at low water. In the country, where the ground

is more elevated and dry, the atmosphere is much more pure. The tempests and rain during the monsoons from the west, the south-west, and the south, are violent and heavy: these winds reign throughout the months of June, July, and August; the meadows are then flooded, and intercourse is maintained only by means of boats. In October the wind begins to blow from the north and north-east; in December it veers to the east and south-east, and in these quarters remains until May; this is the fine season or summer of the year. The mixture of heat and moisture experienced at Manila disagrees with foreigners, but the Indians, habituated to the climate, live to a great age; moreover their dwellings being raised much above the waters, they are in measure sheltered from the effect of their vapour, and as the air circulates without obstruction it serves to refresh them, and make the natural warmth of the climate more tolerable.

### *Earthquakes.*

The Philippines are subject to earthquakes: that which took place in 1645 overthrew a part of Manila. I experienced the shocks of one myself during my stay, so violent that many Spaniards who had been at Lima, assured me they had known of few more so. It began at two o'clock in the afternoon; at first I thought some one was drawing my chair; all the houses cracked, many walls were thrown down, many keystones of vaults were displaced, and the water was thrown out of the gutters and wells. In the house I inhabited three inches of water were ejected from a large cistern which happened to be full; the lamps oscillated, and a carriage under the gateway moved as in passing over a street half unpaved; on my going down into the court the earth trembled under my feet, the house leaned now in one and now in an opposite direction, and at every instant I reckoned upon its falling: when the shocks ceased I was perfectly stupified, and experienced pains in my knees. On returning into the house, I found that the chief pillar which supported the roof was split in twain. The vessels at anchor in the port felt nothing of the shock, but an English ship at sea, eleven leagues from Manila, was affected by it: every part of it cracked, the main-mast was driven upwards out of the step or socket, and required to be supported with broken masts. The concussions of this earthquake lasted three minutes and fourteen seconds, and were renewed at intervals for several succeeding days, sometimes with violence. On the first day, there reigned a calm, the sky was grey and cloudy, the atmosphere heated and heavy; occasionally gusts of wind were experienced, and at intervals gentle showers of rain: such are the prognostics by which earthquakes are anticipated here.

On these occasions, of else general consternation, the Indians are free from alarm; their houses ply in every direction with the shock, and vibrate with the oscillations of the earthquake; their only dread are hurricanes, which to them are of destructive consequence, and sometimes sweep away the houses with those they went to shelter: meantime in turn the Spaniards rest in peace, confident in their dwellings, whose solidity braves the storm. Thus it is with man: he even sees with indifference the adversity of another, and feels but for his own security. Actuated by this sentiment, and in order to implore of Heaven exemption from future accidents, the clergy and ~~all the~~ inhabitants of Manila assemble in processions, and parade with great sumptuosity the image of a saint, whose mediation is commonly invoked on similar occurrences.

### *Government of Manila.*

The governor is the absolute master and president of the council, which is composed of four auditors, and a procurator-fiscal.

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The King's lieutenant and the officers of the crown are held in high estimation.

The governor disposes of all offices, and nominates the alcaldes and the captain of the galëon. His situation, which is held for eight years, is reckoned to be worth annually from thirteen to fourteen thousand dollars \*. When the governor is superseded it, is customary for him to undergo an examination, which lasts three months: within this space all who have subject of complaint against him prefer their charges; this measure, the institution of which was equitable, is not exactly enforced: in some cases it might prove fatal to the ex-governor; its effectuation is therefore commonly prevented by a present to the new governor: instances are said to have occurred where the bribe on such an occasion has amounted to a hundred thousand piastres.

### *Commerce of the Spaniards.*

The Spanish commerce of Manila, which might be very considerable, is limited to that carried on with Acapulco by the galëon, and with China by coasters; of the latter the number has much diminished since the Philippine Company has been accustomed to dispatch its own vessels to Canton, and retain factors at that city.

The Acapulco trade is not open to every one; the right of freightage of the galëon is divided into fifteen hundred portions, of which a large number is reserved for the convents, and the rest is allotted to individuals, either as rewards or bounties.

These portions are sold by the possessors to such merchants as are inclined to ship. The value of the cargo is fixed at six hundred thousand dollars, but commonly it is twice as much. It consists of muslins, India cloths, raw silk, stuffs, and stockings of China silk, of the last article about fifty thousand pair; the remainder of the cargo is composed of gold and silver plate, wrought either at Canton or at Manila by the Chinese; jewellery, spices, gold dust, and different mercery. Great pains are taken in stowing the cargo, and not a foot of vacant space is left. The value of the galëon taken by Anson was a million three hundred and thirteen thousand dollars, exclusive of thirty-five thousand six hundred and eighty-two ounces of pure silver, of cochineal, and of other valuable articles.

The cargo of the galëon at Acapulco yields a profit of cent. per cent., paid for partly in silver, and partly in cochineal, mercury, jewels, cloth, and Spanish wine. The total value of the return cargo may amount to from two to three millions of dollars, of which from two hundred and fifty to three hundred thousand on the account of the King.

Commonly but one galëon is dispatched in the year, but sometimes there are two: this vessel, after receiving the blessing of the Virgin from the ramparts, leaves Manila in the middle of July, passes the strait of San Bernardino, but oftentimes not till a month or six weeks after its departure, and directs its course afterwards to the north as high as thirty degrees to fall in with westerly winds: it then steers eastward to the coast of California, and arrives at Acapulco in December or January commonly, but at latest in February. The sale of the cargo is quickly completed, and the galëon hoists sail in return about the middle of March: it descends to the latitude of fourteen or thirteen degrees, and thence bears to the east till in sight of Guam †, one of the

\* Under the following head of "Commerce of Manila," De Guignes says, which is perhaps nearer truth, twenty thousand dollars.

† Four hundred leagues east of the Philippines lie the Mariana islands, which form a chain extending from thirteen to twenty-two degrees of latitude north, through a space of one hundred and fifty leagues. The chief of these, called Guajam, or Guam, (pronounced Hhooan,) is situate in latitude thirteen degrees twenty-one minutes eighteen seconds, one hundred and fifty degrees fifty-six minutes thirty seconds east of the observatory of Cadiz, according to observations of Seignor Malaspinna, made in the bay of Hufmata

Marian islands, where it waits for intelligence from Manila, renews its water, and takes in provisions: it then continues its way, making for Cape Esphritu Santo, in the island of Samar, enters the strait of San Bernardino, and arrives at Manila in June. On its arrival there is constantly another vessel ready prepared to depart.

The galçons are the property of the King: they measure from twelve to fifteen hundred tons, and mount from fifty to sixty guns. The King appoints the officers, and pays the crew. The captain has the title of general, and bears the standard of Spain at the main mast; his place produces him annually twenty thousand dollars; on this account it is given by the governor only to those he favours. Each sailor receives three hundred and fifty pieces of eight, of which seventy are paid him at Manila and the residue at Acapulco. The complement of men, including passengers, is six hundred. On returning, as the cargo is not bulky, the lower tier of guns is mounted, which when outward-bound is lodged in the hold, and the vessel is reinforced by the addition of two companies of marines.

It is astonishing that the Spaniards, in quitting the strait of San Bernardino, do not bear to the north-east, or even more towards the north, instead of east-north-east, which is their common practice; and that when they attain thirty degrees north they should continue to preserve that latitude, since, if they ascended as high as thirty-six or even forty degrees, they would have stronger winds from the west, and would consequently much shorten their voyage; but the captain of the gallçon is obliged to follow his instructions, however unfavourable to his speedier arrival in the region of rain, an article indispensable for the preservation of his crew. Will it be believed that men can

Humata in April 1787: the circumference of the island is from thirty to forty (Spanish) leagues; the port is denominated San Luis de Apra; three leagues distant from it is the city of Agana, the capital of the Marianas. Of the islands which form this chain, seventeen in number exclusive of islets, the only ones peopled are Guam, Rota or Scypan, called also St. Joseph.

These islands were called originally *de los Ladrones* (the Islands of Thieves) by the Spaniards, who first visited them on account of the pilfering disposition of the natives. Magellan discovered them in 1521; Legaspi subjected them to the dominion of Spain in 1565; and the Jesuits introduced Christianity in 1668. The mission of this order was under the special patronage of the Queen Dona Mariana of Austria, in memory of whom they afterwards received their present name, and who founded an annual bequest of twenty-one thousand dollars for the support and defence of the colony; separate from one of three thousand for the maintenance of a college dedicated to the instruction of the Indians; and another for the stipend of five monks, formerly of the order of St. Ignatius, but now Augustins.

In no part of the world are colonists treated in a better manner. They are maintained by the crown, but pay no tribute; and are regarded as his scholars by a careful master, his children by a benevolent father.

When Mr. Marion in 1771-2 failed on the expedition to the South Seas, in which he unfortunately, with twenty-two sailors and some officers, perished by the hands of the natives of New Zealand, and when the command in consequence devolved on the Chevalier Ducliefmeur, the latter, after suffering great hardships, had the good fortune to reach the island of Guam, which appeared to him a terrestrial paradise. And at this distance from any civilized country, it surely could be deemed no small blessing by a distressed crew to arrive at the only port in the vast expanse of this sea, in which the sickly and exhausted mariner could hope speedily to recruit his strength, where all provisions and necessary refitments were in abundance, and where a city was to be found, built in the European manner, with straight streets, a church, fortifications, public buildings, and a civilized population. The healthiness of the island is best evident from the ~~proof~~ afforded on this occasion. Of two hundred men sick of the scurvy (according to the account rendered by M. de Crizet, of the Mascarin, the compiler of the narrative of this voyage,) not one died, but all speedily recovered, thanks to the air, the food, and the liberal assistance afforded by Don Mariano Tobias, the governor of the islands.

The Abbé Raynal, who received his information respecting these islands, most probably, from officers in this expedition, however prone thereto in most instances, has here nothing exaggerated in his account of them. Hist. Pol. de los Estab. Ultram. de las Naciones Europ. per Edv. Malo de Luque, tom. v. p. 141, et seq. Madrid, 1790.

be so venturesome as to undertake a long voyage without a due store of water, and with the sole dependence for supply on what may fall from the clouds? Yet this is the fact. The Spaniards avail themselves of every vacancy in the vessel to stow their goods in; and instead, like us, of carrying out store-casks of water, they merely carry out jars which are suspended from the rigging to catch the rain when it falls.

After the commerce of Acapulco, comes that carried on by masters of coasters and different individuals of Manila. These dispatch small vessels laden with rice to Macao, which they exchange for various merchandize of China. The Spaniard here is rarely himself an adventurer; either he lends his money to the Indians who put it to profit, or lays it out in the purchase of raw sugars to sell again.

The rich persons of Manila do not carry on trade even with Acapulco with their own money, but borrow funds for the purpose of the convents, which they return with interest on the return of the galcon. In this case the net profit of the shipper is estimated at from twenty-five to thirty per cent.

#### *Commerce of Foreigners.*

At times the port of Manila has been open to all friendly nations, but, most commonly, trade with foreigners\* has been prohibited. When I was there, it was free.

The English trafficked thither under the Swedish and Danish flag, Armenians likewise from the Indian coast, the Portuguese, and the French. The Chinese at all times trade thither in junks.

#### *Importation.*

The import trade consists of various articles from Europe, to wit: anchors, sheet, squared, and bar iron, and iron wire, grapplings, anvils, German steel, nails from one to ten inches long, cabinet makers' and carpenters' tools, sheet-copper and copper fastenings, tin in plates, brass wire, sail cloth, thread, needles, knitting-needles, cables, cordage, lead in sheets and in pigs, sand hour-glasses, window-glass, drinking-glasses, European cloth, wines, brandy, liquors and sweet wines, essences, eau de Cologne, hats, silk stockings, glass lamps, pearl and coral for rosaries, rose-diamonds, and brilliants unset, lace, and Brittany linen.

The articles imported from India are cambayas, handkerchiefs, malmoles, plain, embroidered, and worked with gold and silver, cambricks, elefantas, cotton cloths from the north, percalas, bordered petticoats, basquinas, handkerchiefs with devices, bafetas, garras, and Masulipatam handkerchiefs without gloss, with some handkerchiefs and cambayas from Anticour, &c.

The merchandize brought from China is, different silk-stuffs, silk stockings, nankeens, gold and silver plate, porcelain, &c.

#### *Exportation.*

The shipments outwards are composed chiefly of sugar, indigo, tobacco, leather, tallow, honey, wax, rice, chocolate, corn, biscuit, cattle, wax candles, dying woods, ebony, birds'-nests, pearls, mother of pearl, and rattans\*.

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\* That is to say, Europeans.—TRANSLATOR.

† The following is an account of the articles, the produce of the Philippines, imported into Old Spain, in the years severally affixed to them:

In 1788, by the ship Conception:—indigo 1100lbs.; silk 113lbs.; cotton 180lbs.; Sibucan wood 700lbs.; chintzes 150 pieces.

On the arrival of a ship at Manila it has to produce its manifest within twenty-four hours ; and the captain should see that it be exact, for if any article be landed not mentioned in his declaration it is confiscated. The list of the cargo is commonly shewn first to the governor, and the officers of the crown, who mark the articles they wish to purchase ; to sell these to any one else would be construed an offence. The governor and the officers pay very regularly ; and the merchant would have reason to be satisfied if they took the whole cargo, but they scrupulously exact, on the other hand, and with justice, that the bulk of what they buy should correspond with the sample.

The cargo is discharged at the custom-house and deposited in warehouses, to which the carriage is expensive, as the porters are very slow in their movements. At the custom-house there are but five persons to take cognizance of what is landed, and to receive the duties ; it follows, as a consequence, that the goods are long in being examined, so much so, indeed, that were twenty vessels to arrive at Manila it would take a year to clear them. When once the goods have passed the examination they may be removed. The custom dues are eight per cent. on the presumed sale price, and the assessment of them depends on the chief custom-officer. This assessment sometimes exceeds the price for which the goods sell, but should it, no restitution is made, as the fiat of this plenipotentiary is irrevocable. At times, however, this officer is found so complaisant, for instance when I was there, as to allow the goods to remain in the custom house without paying duty, except in case of sale.

Commerce at Manila is subject to much difficulty and obstruction. Every thing relative thereto is carried on slowly, and with great trouble ; at every step requests are necessary on stamped paper ; for example, on unloading or loading a cargo, and when laden, for permission to sail. It also takes a length of time to receive a cargo on board, as the boats are fearful of venturing over the bar in case of the wind blowing in the least fresh ; moreover, a ship is not free to sail at pleasure, but must wait for a licence, which on account of the festivals and processions so frequent in this country, and during which no business is transacted, is long delayed. *Dè espacio*, give breathing time, is the answer of the Spaniard to the impatient solicitations of the captain, who must reckon himself fortunate if he leave the bay before the monsoon changes, and consequently before the adverse winds set in.

#### *Advantageous Position of Manila.*

The great importance of the Philippines is apparent from what has been described. These islands from their position might carry on an immense trade with China, Cochin-China, Camboja, Borneo, the Moluccas, the Indian coast, and that of America ; but the Spaniards, intent on their commerce with Acapulco, have so much neglected every other, that but few vessels are freighted by them of the great number they have means to employ.

The Philippines produce a variety of merchandize for exportation, to which might be added cotton, areca, and pepper. Did they follow a wise policy the Spaniards would stimulate the industry of the Indians, and induce them to cultivate these three articles. ~~They~~ They would supply them with objects of first necessity to barter with China for its

In 1789, by the Ships Santa Rufina, Nuestra Senora de las Nieves, and Nuestra Senora de la Concepcion : — indigo 45,825lbs.; silk 1587lbs ; do. manufactured 364 pieces ; Sibucan wood 3550lbs.; cotton 29 bales ; 500lbs. spun ; 570 pieces manufactured ; pimento 631lbs ; sugar 1200lbs ; nutmegs 244lbs.; wax 1000lbs ; algalia 351lbs.; mother of pearl 12,740lbs ; 2 ingots of gold, and 24 golden chains ; 55 tables of different kinds of wood.—Appendix to Hist. Polit. de Las Nac. Europ. tom. v. p. 120 et seq.



filks ; would prevent the emission of silver to that country, and occasion the dollars of America to take their course to Old Spain. Nor would these be the only advantages accruing from such measures.

The Spaniards by promoting on a large scale the culture of cotton, would be enabled to undersell the English in China ; in this case the demand for the cotton goods of Bengal would diminish, and the English East India Company, no longer finding the same nourishment for its speculations, would be forced to make increased remittances from London, and consequently have to carry on a trade, prejudicial in extreme to its interests. In this contest the Spaniards have nothing to hazard, but much to gain. The proximity of the places of intercourse, and the moderate charge for freight, would necessarily put it in their power to offer their cottons at a much lower price than the English ; and the Chinese would naturally prefer the cottons from Manila, for which they pay in filks, to those they purchase of the India captains, who constantly receive silver in part payment, and find means, notwithstanding the prohibition of the mandarins, of carrying it out of the country.

Manila might also become an entrepôt, not only for the resort of Spanish but, if government should allow it, of foreign vessels also. In fact this colony furnished with the merchandize of China, either by means of Manila coasters or the Chinese junks, which annually resort thither from Emouy, merchant ships from Europe would rather take in here their return cargoes than proceed for the purpose to Canton, as by these means they would not only save time but likewise the charge of the factories and residence, and of the tonnage payable at Canton.

The Spaniards of Manila might even themselves proceed to the coast of India with silver, indigo, and merchandize from China, and there obtain in exchange cambayas, muslins, cloths, and handkerchiefs, either for investments on European ships or on those for Acapulco. Trade conducted in this manner would become brisk, and be profitable to the colony. Still if any great advantage be sought it will be requisite to place the colony on a respectable footing of defence by maintaining some European troops ; by fortifying the entrance of the bay, and the island of the Corregidor ; by fitting out some frigates to cruise along the coasts, and prevent the Moors from making incursions upon the Spanish territory ; and by diminishing and simplifying the custom duties, and affording greater facility and dispatch to commercial transactions. High duties payable on articles of import into any country are not a tax on the foreigner but on the subject, as the vendor constantly augments the price of what he sells in proportion to the impost he pays ; thus the purchaser pays the duties, and so much more money goes out of the country\* : moreover, proportionally as the duties are heavy is the importer encouraged to elude them ; and as in what is smuggled the whole duty is lost, the state becomes the loser.

Let the duties exacted, as well from the natives as from foreigners, be lessened to a trifle, and let a greater facility be affected to purchases and sales, and commerce will increase a hundred fold : moreover, in proportion to its increase will be the augmentation of the duties ; and the revenue will be found not only to equal the expences, but the sovereign, in addition, will withdraw an excess from a colony which at present annually exacts a remittance from Spain for its support.

\* This last conclusion is erroneous. If a hundred pounds be the value of a parcel of goods imported, and the duty on them be eight pounds, when the buyer pays for these goods one hundred and eight pounds, only one hundred pounds leaves the country, as eight had before been paid by the importer to the treasury of the country.—TRANSLATOR.

For the internal discipline, the government should nominate as *alcaldes* none but men of probity; a council composed of merchants should be instituted for the superintendence of commerce, for proposing useful measures, and putting them in execution; a similar council should be established for the furtherance and superinspection of agriculture; and lastly, the Indians be endeared to the government by being placed on par with Spaniards in respect to tribute, and thus be induced to marry. These should be roused from their sluggishness, and inspirited to an active life, by presenting them a profitable market for their productions; they should be encouraged by premiums to addict themselves to agriculture, to works of art, and to become gold and silver smiths, black and white smiths. But for the promotion of this object a reduction of the Chinese residents would be indispensable: a certain number of these might be tolerated. It would also perhaps be advisable to invite strangers, and afford them assistance in establishing themselves. But in both these cases much caution would be required; for too great a number of foreigners might introduce danger, and originate a combination with the Indians for the expulsion of those who received them with kindness.

By measures such as I have proposed the Spaniards would be awakened from the lethargy which appears to absorb their faculties; commerce, in a languishing state, and nearly at its last gasp, would be called into life and activity; individuals, in a free communication between China, Acapulco, and Manila, would find an immense source of wealth; and government, in seconding their efforts, would be a gainer of money and sailors, would acquire a respectable navy, and with it competence to repel any attack, however unexpected.

From what I have said it is easy to perceive that with slight efforts the Spaniards might carry on a very extensive commerce in the Philippines, and reap considerable profit from a colony, the productions and resources of which are incalculable; but they are so regardless of the advantages to be derived from these islands, that under Philip II. and Philip III. it was a subject of deliberation, in the council at Madrid, whether or no Manila should be abandoned.

Nothing could have been more desirable than that these islands should have been ceded to the French. Their possession of them, according to Cardinal Alberoni in his political will, would not have been less useful to the French themselves than beneficial to the colony. But, if the Spaniards are to remain masters of them, that they should look with diligence to their security is most essential. A nation, ambitious of monopolizing the commerce of the world, looks with anxious eye on the island of Manila: once for a short period mistress of this rich colony, she repents its restitution, and should it a second time come under her dominion, will never yield it again. Spaniards! look seriously therefore to the preservation of the Philippines: the loss of them would be irreparable; anticipate the consequence of a disaster, and have not to seek a remedy when too late.

#### DEPARTURE FROM MANILA, AND RETURN TO THE ISLE OF FRANCE.

WE left Manila the 7th of March 1797\*, at five in the evening, and on the 13th doubled Pulo Sapate, keeping its western side. This course should be avoided on ac-

\* The shoals of Boulinao and Maffinlou, without the port of Manila, are laid down too much towards the east in the charts; they lie more westerly, and nearer to Scarborough bank.

count of a shoal which runs out nearly two leagues to sea from the north-north-western part of the island, on which there is but little water.

The 21<sup>st</sup> we entered the Strait of Banca, the currents then running out and in at the same time.

We reached the Strait of Sunda on the 1<sup>st</sup> of April, and left it on the 3<sup>d</sup>, with a wind from the north-west, which afterwards veered to the north, increasing in violence till on the 14<sup>th</sup> it swelled to a tempest. For twelve hours we were driven along, the gunnel constantly under water, and were obliged to throw our guns overboard to lighten the vessel. The wind at length abating, we again hoisted sail, and continued our course towards the island Rodrigues, which we descried on the 28<sup>th</sup>.\* We kept to leeward of this island to avoid the English cruizers; and, after coasting under the south side of the Isle of France, during the whole of the 1<sup>st</sup> of May, we cast anchor in the port in the evening.

The latitude of the island is twenty degrees nine minutes forty-five seconds; its longitude fifty-five degrees eight minutes east of Paris. From north to south its length is about fourteen leagues, its breadth ten, and its circumference forty.

The Isle of France has two ports; but though in my two voyages hither I made the circuit of the island, at only a short distance from the coast, I did not see the Grand Port, or that on the eastern side of the island. The air is temperate, and even cool in the pens\*; the heat of the climate is powerfully felt only in the town, where the surrounding mountains prevent the cooling influence of the south-west wind.

The south-west generally prevails at the Isle of France, except from October to April, in which interval the winds are variable; this period also is the rainy season. At times violent hurricanes occur: the rivers are forced from their beds, plants and trees are torn up by the roots, and houses are levelled with the ground; vessels are not always in safety even in the port, I myself having seen some on these occasions driven on shore. The months in which hurricanes are common are those between the end of September and March; they owe their origin apparently to winds contending with the monsoons; and to a similar cause must the sudden gusts be attributed in the China seas.

The island is surrounded with reefs, which in some places extend more than a league from shore; the south side is more steep, and the sea breaks against it, except in some few spots.

Every thing denotes the existence, in some former time, of a volcano in this island; the ground is almost in every part overspread with volcanic stones, round, of various size, generally compact, but occasionally porous, and of a greyish colour, inclining to black. The mountains are numerous, and seem to have been convulsed, split, and broken by earthquakes, but they are not of volcanic origin; their strata are more or less inclined towards the horizon; according to the general disposition of the species of stone of which they are composed.

The soil is tolerably good, but dry; in many cantons it is of a reddish colour. The earth is not worked deep, and is broken up with a pick-axe: the roots of plants strike beneath the stones, and thus are kept cool and beyond the parching influence of the sun. Wheat is here cultivated, barley, oats, rice, maize, manioc (maniot Indorum), cotton of excellent quality, the sugar-cane, indigo, and coffee, the last inferior to that of Bourbon. Here also plantations of cloves are seen, surrounded by hedges of jam-rosa to defend them from the wind, by which they would otherwise be readily broken.

\* A Creole term for houses and plantations in the country.

Nutmeg trees are not equally common : in the plains of Wilhem I distinguished some soap trees (*saponaria Americana*.)

In the gardens part of the vegetables of Europe are grown, and some sweet potatoes. The most common fruits are the banana, mango, ananas or pine-apples, pangle mouffe, guavas, the atè, papaya, and the peach. Cocoa-trees succeed well, but the number of mangooftans (mangoutiers) is inconsiderable. Oranges, which are very sweet in the Isle of Bourbon, are not good on this island.

The Isle of France is watered by a great many rivulets ; some proceed from the center of the island, and are of sufficient size to obtain the name of rivers ; the coasts furnish a moderate supply of fish.

The island was at one time wholly covered with wood, but part of the trees have gradually been felled, either for the sake of clearing the ground, for sawing into planks, or for the structure of houses ; in felling the trees no management has been observed, and none are planted in succession. The soil, wholly in parts despoiled of its shelter, has in consequence become dry and arid, as much from its exposure to the great heat of the sun, as from nothing remaining to arrest the vapours necessary for the formation of clouds, and consequently of the rains which kept up its fertility. For this mismanagement a remedy has been sought in the culture of a tree called black wood ; but this tree is at best fit for nothing but firing, and has not every where succeeded, owing to the too great aridity of the soil, or from the earth having been washed away by the rains from the removal of the impediment opposed by the woods, and affording no longer a sufficient sustenance for the roots.

To the causes of the island being thinned of trees before noticed, others must be added. In the first place there grows in the Isle of France a thick and coarse grass, which serves as fodder, and which, after attaining a considerable height, becomes dry towards the close of August. This grass is set on fire by the negroes in the month of September, and the flame which spreads to a distance dries the trees and causes them to perish. Secondly, the allowance granted to the negroes to cut faggots in the mountains impedes much the growth of trees, as they lop off branches without paying any attention to whether or no they injure the tree. And lastly, the goats belonging to the Indians who inhabit camp Malabar, and which feed on the heights, browse on and destroy every thing. From the aggregate of these causes the woods are gradually, but rapidly, destroyed.

Among the trees of the Isle of France must be noticed that which produces ebony, the tacamahaca, the milk tree, and the mat tree with large and small leaves, the cinnamon tree, the olive, and the stinking tree. The wood of these is well adapted for cabinet and carpenters' work.

When I arrived in the Isle of France, in 1796, the hedges in every quarter were formed of the opuntia, or Indian fig ; but some one since then having brought into the colony a quantity of the eggs of the kirmes, that insect multiplied with such rapidity, as to have entirely destroyed these trees.

The woods abound in stags, wild goats, wild hogs, hares, monkeys, and rats and mice in multitudes ; the three last animals very destructive to plantations. In the woods also are found paroquets, pintados, bengalis (a little red bird), and a species of partridge.

The insects most troublesome are carias kakerlaques, musquitos, scorpions, scolopendræ, and wasps. It is affirmed that serpents cannot exist in the Isle of France. The assertion is difficult of proof ; but, what is most sure, there are none to be found.

Cattle are not abundant, sheep are rare, and the beef, excepting that from Madagascar, is not good : the cows brought from Europe yield a tolerable quantity of milk, those of the island but little.

If the Isle of France had been a foreign colony, I should give a sketch of the manners and customs of the inhabitants ; but as all I could say is already known, I shall simply point out its utility and importance to the metropolis.

*Importance of the Isle of France.*

By the death of thousands, and by considerable pecuniary losses, have most of the nations of Europe purchased the establishments they have formed in Asia. Whatever consequence may ultimately result from the possession of these distant colonies, to support and preserve them is a matter of absolute necessity, as long as any one European power continues to maintain a commerce with India. This commerce in itself may be a matter of indifference to us, and even useless, if any can truly be so considered in a great state ; but should we discontinue it, we should be placed in a state of dependence, and render ourselves the tributaries of those by whom it might be continued.

Colonies have always been formed for the advantage of the mother-country : in this light they have ever been contemplated ; and should they at times have failed to answer the purposed end, the cause of the failure is more to be attributed to radical vices in the establishment of them, than to unfortunate occurrences, or such as could not have been foreseen.

In looking to the value of a colony two things are to be duly weighed ; firstly, the draught of men and money from the metropolis which they occasion, and secondly, the resources and advantage presented by their position and their commerce.

Under the first aspect, if the expences of the establishment are not counterbalanced by considerable profits or other material benefit, the consequent loss of men and money is burthensome to the state ; but on the other hand those colonies which by their position can readily be closed against foreign commerce \*, and the population of which fails to increase in proportion with their wealth, are of singular utility to the metropolis.

Now, insular colonies present this double advantage, they can at pleasure be laid open to or closed against foreign trade ; and they hold out no prospect of ever becoming hurtful to the mother-country by their increasing wealth or population.

Continental colonies, on the reverse, possess in themselves many inconveniencies ; and though perhaps they present more extended resources in their larger population, and the greater activity and value of their trade, in these very momentary advantages they carry with them the seeds of disorder and revolt, seeds perpetually disposed to germinate and ripen to maturity. In fact, after occasioning their mother-country material sacrifices of both men and money, when once they attain a certain pitch of prosperity and power, they rebel against their parent, and cease to acknowledge her authority, of which we see an example in the conduct of the United States of America in the last century.

\* Trade with its colonies naturally belongs to the metropolis, and other nations should be admitted to traffic with them only at the option of the sovereign government. In this case also the foreigner ought to pay an extra tax on the importation as well as on the export of merchandize ; for, if he were permitted to buy or sell without paying such extra duties, the colonist, at all times inclined to buy as cheap as possible, would sell his produce in many instances in preference to the stranger, to the ruin of the merchant of the mother-country. To this evident injury is to be added the rise of price of colonial produce, and the diminution of that of European commodities, consequent on a full market and the competition of foreigners, the fatal effect of which is the destruction of the commerce of the mother-country, and the annihilation of its navy.

The English establishments in India, purchased by the effusion of so much blood, by the expenditure of such heaps of treasure, these establishments must terminate soon or late, either in the return of the people to the dominion of their former masters, or in their erecting themselves into several different states independent of British sway.

Time, events, and political changes produce in continental colonies, as a natural result, inevitable revolutions; while insular establishments, more concentrated and of course more easy of superinspection within, and more readily protected against external foes, promise from their nature a perpetuation of their union with, and constant benefit to, their mother-country.

Among the numerous colonies belonging to France, the Isles of France and Bourbon must be regarded as highly important, not so much on account of their productions as their position.

The Isle of Bourbon defended by itself is from its contiguity indispensably necessary to, and intimately allied with, the Isle of France.

The Isle of France, on a respectable footing of defence, has nothing to apprehend from its enemies. The English may send out expeditions against this colony, but its distance from them will ever be an impediment to their arriving in good condition; and when arrived in its vicinage, the winds, want of provision, and obstacles of every description, will soon oblige them to abandon their enterprize.

This island may be deemed the key of India: France may send hither men and vessels, and here in secret prepare its expeditions unknown to England.

From the situation of the Isle of France, said the English council of Bengal, in 1768 \*, the French possess a device of their point of attack, and their designs cannot be fathomed but at the moment of their being carried into effect upon the coast of India.

But not only does the Isle of France contribute from its advantageous position to assist the military operations of government, this favourable site may also greatly promote the growth of the commerce of France; it is susceptible of becoming the entrepôt of the merchandize of Asia, and of furnishing therewith, in addition to the produce of its soil, return cargoes to those vessels dispatched from Europe principally with wines, which have neither time nor means to proceed to India, for the merchandize they need to complete their cargoes.

Commerce, as it increases, will furnish augmented means of subsistence, and the population will in consequence become great in proportion, especially if government render assistance to and encourage those individuals solicitous of establishing themselves in the Isle of France.

By such measures it would attach to the soil a number of proprietors who, too poor to leave it, would render it fertile by careful and sedulous culture; whereas at present three-fourths of the inhabitants, incessantly tormented by the common but frequently chimerical anxiety of making a rapid fortune in order to return to Europe, are neglectful of their plantations, and thinking but of the present moment, take little heed of the future.

To launch into a minute detail of the productions of this isle, and of what value it might become, would be of no utility: I have sought merely to impress an idea of its importance; and should what I have mentioned fail of this effect on the reader, I intreat him soberly to weigh this observation of a famous character well known for his political ability: "While the French," said Lord Chatham, "keep possession of the Isle of France, the English cannot be deemed masters of India."

\* View of the rise of the English government, &c., by *Verelst.*

## RETURN TO EUROPE.

THE capture of Pondicherry in 1793 having delayed the remittance of the customary funds for the maintenance of the French establishment at Canton, as well for that as the succeeding years, I determined, as before observed, on failing to the Isle of France in 1796, in view of obtaining there the payment of my arrears. Deceived in my expectations from this quarter, the laws of the island not allowing the emission of money for any purpose foreign to the service of the colony, I was indebted wholly to the kindness of M. de Malartie, the governor, and M. Dupuy, the intendant, for a small loan of four hundred dollars, which enabled me to return to China at the close of 1796, but was insufficient to maintain me at the residence. I therefore, in 1797, again left Canton for the Isle of France, as I had there a better chance than at Canton of receiving advices from the minister, to whom I had already written, and to whom I again wrote on my arrival, requesting a remittance of funds in case of my continuance in China, or an order for my return to Europe.

After residence of three years at the Isle of France in continual expectation of an answer, receiving none, I resolved on leaving that colony, and quitted it 21st March 1801, on board a Danish ship. We lost sight of land the 23d, and on the 12th of April passed Eel Bank (Le Banc des Aigüilles) in latitude thirty-six degrees fourteen minutes. The fear of meeting with cruizers prevented our making the Cape of Good Hope, St. Helena, the island of Ascension, or the Azores, so that the first land we descried after passing north of Ireland and Scotland was the northern part of the island of Ronaldsha: at length, on 11th June we anchored in Norway at Fleckerhoe, a short distance from Christianland, after a passage of two months and nineteen days.

The English being at war with the Danes I took my passage in a sloop of this last nation; after traversing the Categat, coasting along Jutland, and a portion of Fionia, I arrived at Korser, whence I repaired to Copenhagen; I left this city after a short time for Holland, and thence repaired to Paris, where I arrived 4th August 1801, after an absence of seventeen years.



A  
VOYAGE  
TO AND FROM THE ISLAND OF BORNEO,  
IN THE EAST INDIES;

WITH A DESCRIPTION OF THE SAID ISLAND;

Giving an Account of the Inhabitants, their Manners, Customs, Religion, Product, Chief Ports, and Trade: together with the Re-establishment of the English Trade there, An. 1714, after our Factor had been destroyed by the Banjareens some Years before. „

*Also a Description of*

THE ISLANDS OF CANARY, CAPE VERD, JAVA, MADURA;  
OF THE STREIGHTS OF BALLY, THE CAPE OF GOOD HOPE, THE HOTTENTOTS,  
THE ISLAND OF ST. HELENA, ASCENSION, &c.

With some Remarks and Directions touching Trade, &c.

The Whole very pleasant and very useful to such as shall have Occasion to go into those Parts.

By Captain DANIEL BEECKMAN \*.

TO THE HONOURABLE SIR GREGORY PAGE, BART

SIR,

THE indefatigable pains and care you always took in promoting the advantage of the Honourable East India Company; the eminent zeal that has always appeared in you for the good of your country in general; together with the obligations I am under for the many favours I have had the honour of receiving already at your hands, have induced me to take the liberty of imploring, most humbly, your patronage to this work; begging your acceptance thereof, as a small testimony of that gratitude I owe you.

The great and uncommon qualifications you are endowed with, render you the fittest person I know of to countenance a work of this nature: and I do not question, but the protection of a gentleman of so extensive a knowledge in trade, will make it meet with more regard and respect than it could otherwise expect. If what observations I have here made may be so happy as to merit your approbation, I shall think my pains well bestowed, and my chief end is entirely answered, by shewing with how profound a respect I am, Sir,

Your most humble, and most obedient Servant,

D. BEECKMAN.

## TO THE READER.

IT is a common saying, and indeed generally proves true, that old men and travellers do give themselves great liberty in relating fictitious and improbable stories: the distance of time being as great a protection to the former, as that of place is to the latter: but I can assure my reader, that the case is otherwise here; for I made it my study to adhere, as much as possible could be, to truth, especially in those things which fell within the pale of my own knowledge, having always made it my maxim, to have a greater regard to utility than pleasure. As to what I had by ~~hear~~ <sup>hearsay</sup> from the natives, I neither have inserted the hundredth part of what they told me, neither do I much insist on the truth of what I have inserted, though more probable than what I omitted; but do leave it to the reader's choice to believe or reject as he shall think fit.

I am sensible that I might have rendered this work more agreeable to some persons, and made it swell to a much larger volume, in following the steps of several other authors, by stuffing it with many strange improbable relations, whereby it might be as acceptable as the bundle of lies published by the famous Ferdinando Mendez Spinto, &c. But my design is not either to amuse, or abuse the public, or to please such as delight in fabulous romantic legends or stories. On the contrary, I have endeavoured herein to be as useful as possible to those who may hereafter have occasion to go into the countries I have given an account of, by laying down such directions and rules in regard to trade, &c. as they may the better govern themselves by, and avoid a great many inconveniencies that might otherwise happen.

I must own, that I had some reluctance to undertake such a task, as not thinking myself of a genius or talent proportionable thereto; but considering, that among so many printed voyages to and from the East Indies, there is but little or no account given of Borneo, (the greatest island of all the Indian seas, and where as considerable a branch of trade might be settled, with due care, as any the Honourable East India Company is in possession of) and that the other supercargos, and myself, were the only Englishmen that ever had such an opportunity of knowing both the humour of the people, the way of dealing with them, the country, product, and price of their commodities, as having been a considerable time conversant among the natives; and having ventured often far up into their country, whereas the factory settled here before were forced to trade with them, as it were, sword in hand, and consequently could have but very little knowledge of those matters: considering, I say, all this, I thought it was my duty to publish what, in my opinion, must needs be very advantageous to the public, and in particular to the Honourable East India Company. Moreover, the streights of Bally having seldom or never been before navigated by the English, especially during the western monsoons, which is the only time we have occasion to make use of that passage, because more expeditious for home-bound ships, I thought it necessary to be as particular as I could, thereby to make it more easy to those who shall hereafter have occasion to sail that way, being forewarned of the difficulties I met with there, and of the method I was at last forced to take to get through.

One thing I will make bold to say, that I have been so particular in relation to the Banjareens, it being all of my own knowledge, that whoever goes to the port of Banjar-Masseen, though never so great a stranger to the way of trading, cannot fail to

manage his affairs there with far greater success, by following the instructions I have here laid down.

That the whole may prove to be of as great use as intended, is the sole aim of,

Your humble Servant,

D. B.

## CHAPTER I. — *Giving an Account of the Canary, Cape Verd, and Christmas Islands ; with a Description of Batavia, &c.*

AS so many accounts of voyages to and from the East Indies have been already made public, I think it superfluous to trouble the reader with a particular journal of this voyage, either going or coming ; therefore I shall only relate such things as I judge most material to the present subject.

I sailed out of the Downs on the 12th of October, anno 1713, in the Eagle-galley, in the service of the Honourable East India Company, with full orders and instructions from them to use my utmost endeavours (in concert with the other supercargos) to re-establish a trade at the port of Banjar-Masseen in the island of Borneo, from which place the natives, some years before, had expelled the English, and destroyed their fort and habitations, putting many of them to death, as shall be more particularly related in the latter part of this work.

Several attempts of renewing a correspondence and trade with them have been since made, as well by the English as the Dutch, but in vain ; until fortune favoured us with success. I doubt not but to make it fully appear, that it may be improved much to the advantage of the East India Company.

On the 29th we passed close by the isles, or rather the rocks, called the Salvages, lying in the latitude of twenty-nine degrees twenty-five minutes north, and longitude of sixteen degrees thirty-six minutes from London. We sailed along to the southward (the weather being exceeding pleasant for three days) in sight of most of the Canary islands, but could not as yet see the top of Pico-Teneriffe, because of its being so much higher than the vast body of clouds that encompassed it ; though sometimes (when clear of clouds) it may be seen at above fifty leagues distance at sea. On the 1st of November we were between the islands of Teneriffe and of Grand Canary.

These islands were by the ancients called *Insulæ Fortunatæ*, or the Fortunate islands ; but by the moderns Canary islands, from the isle of Grand Canary, which is the chief and largest of them. They were well known to the Romans ; but after the fall of that empire, they lay hid in oblivion and undiscovered by the Europeans, till about the year 1330, or rather 1334. However the natives, a rude and ignorant people, who were governed by their own Kings (each island having one), continued in possession till the year 1417 ; when Catharine, daughter to our John of Gaunt duke of Lancaster, and widow of Henry the Third of Castille, during the minority of her son John the Second, sent forces thither, and subdued four of those islands, viz. Lancerota, Forteventura, Gomera, and Ferro. The other islands remained under their own Kings till the year 1483, when Ferdinand, surnamed the Catholic, subdued them all ; ever since which time they remained annexed to the Crown of Spain, and are the general rendezvous of the Spanish West India fleet homeward bound.

They are situate westward of Biledulgerid, between twenty-four degrees thirty minutes and twenty-eight or twenty-nine degrees of north latitude, if we comprehend the











the Salvages ; they are ten or twelve in number, but only seven remarkable, viz. Lancerota or Lancelotta, Forteventura, Canaria, Teneriffa, Palma, Gomera, and Ferro; the two first are towards the east, the two last towards the west, and the three other in the middle.

The isle of Lancerota is about thirteen leagues in length from north to south, nine in breadth, and forty in circuit.

Forteventura is in length from south-west to north-east about twenty-five, the breadth being very irregular ; for in the middle it is but four leagues only, there being an isthmus dividing it into two peninsulas, which formerly had a wall across it ; the circuit is about seventy leagues, because of the two gulfs that are on each side of the isthmus.

Canaria, commonly called Grand Canary (which gives its name to ~~the~~ the rest) is equally large as it is long, being about thirteen or fourteen leagues either ways, and in circuit about forty : the town of Canary is a bishop's see, and the residence of the Spanish governor.

The length of Teneriffa is variously reported, some making it twenty-two leagues, others more, and some less ; its breadth is very irregular, viz. from three to fifteen, and the circumference about sixty leagues ; towards the middle is that famous and vast hill, or peak spoken of before, called by the Portuguese El Pico, counted the highest in the world, being about two miles and a half perpendicular ; it rises like a pyramid, or rather a sugar loaf. Here the Dutch place the first meridian ; but the French place it on the isle of Ferro ; as Janfonius does on Corvo, the most westerly island of the Azores ; and Hondius on St. Nicholas, one of the Cape Verd islands.

The three other islands are lesser, each not exceeding ten leagues in length, five in breadth, and twenty-five in circuit.

The air of these islands is very wholesome, though very hot ; the soil most fertile, producing a great abundance of wheat, barley, millet, and excellent wine ; the vines (as they say) being transplanted hither formerly from the Rhine by the Spaniards, in the reign of Charles the Fifth, Emperor of Germany and King of Spain ; where, by the change and nature of the soil, instead of sharp Rhenish, they produce that sweet delicious wine which we call Canary, and which is vended so much all over Europe, that some relate fifteen or sixteen thousand tuns have been yearly transported into England only.

Here are also a great number of palm-trees that bear dates ; dragon-tress, from whence is drawn a red thick liquor called dragon's blood, with fig, olive, pomegrate, citron, and orange trees, the fruit whereof is most excellent ; likewise plenty of sugar, woad, honey, wax, and plantons, which is a fruit not unlike a cucumber in shape, and when thoroughly ripe eats as delicious as any sweetmeats ; they have also a great number of wild goats and asses, the milk and hides whereof are a good commodity.

The isle of Ferro is very dry, and in some places barren for want of water ; but this defect is in a great measure supplied by a tree that grows in the middle of the island, the trunk whereof is about two fathom round, from the leaves of which does continually distil as much water as fills a large stone cistern, or reservoir, built by the inhabitants on purpose, containing about twenty thousand tuns, which supplies the cattle and whole island with wholesome fresh water. This miracle of nature is said to proceed from the vast body of clouds that hang about the tree all night and a great part of the day.

The inhabitants are, for the most part, Spaniards originally ; there are some few of the aborigines, who are a very nimble sort of people and vast eaters ; they live generally in caves among the mountains, feed upon milk chiefly, and are said to be

Pagans by religion; though I believe there is hardly any<sup>1</sup> of that persuasion now, the Spaniards being so zealous to propagate the Christian doctrine according to their own way.

On the 2d of October, in the morning, we had a sight of the top of El Pico; hereabouts we met with the trade-winds, so called because they always blow between the east-north-east, and north-north-east, they continued with us till we came near the equinoctial line; which was no small advantage, as well as pleasure, to us in our outward-bound passage; not only for the expedition we made through the means of their brisk gales (our ship running at least one hundred and twenty miles in twenty-four hours) but also for the coolness and mighty refreshment we received from them in so hot a climate; and likewise for the diversion we had from the prodigious numbers of dolphins, albocores, bonetos, flying-fish, &c. many of the latter flew on board our ship, when pursued by the dolphins, or other fish of prey, whereof there are vast multitudes in those seas: we caught a great number of dolphins, &c. with large hooks, which we towed to the stern of the ship, baited with either an artificial or real flying-fish, or sometimes with a bit of fat pork or beef, they being so prodigious eager that they will snap at almost any thing; the poor sailors make many a hearty meal of them, especially when fresh provisions begin to be scarce.

In this pleasant manner we continued from the Canary Islands, steering away south-west by south nearest, till the 10th, when we got sight of the islands of Cape Verd, which are ten in number, viz. St. Antonio, St. Vincent, St. Lucia, St. Nicolas, Sal, Bonavilla, Mayo, St. Jago, Fuogo, and Brava. These were by the ancients called the Hesperides, or Gorgades; their orchards of golden apples, kept by a never sleeping dragon, are celebrated much by the Greek and Latin poets; they are now inhabited by the Banditos, or banished Portuguese. These islands afford a most pleasant vista to those that sail between them.

The island of St. Jago is the largest of all, being in length about forty-five leagues, in breadth ten, and in circuit ninety-five.

St. Nicolas and St. Lucia are each in length about twenty-five or twenty-six leagues, in breadth about seven or eight, and sixty in circuit. St. Vincent and St. Antonio are not of above half the extent of these, and the other five are still lesser; for the greatest of them is not ten leagues in length, and twenty in circuit; the air in general is unwholesome; the soil of some is stony and barren, as particularly that of Sal, Bonavilla, and Mayo. The first has a great number of wild horses, as also the last: but besides, it has a much greater multitude of wild goats, and such a prodigious quantity of salt, that it could load (as is reported) above two thousand sail of ships, so that they are all named, by some, the Islands of Salt. The other islands are more fertile, and produce rice, maiz, or Indian wheat, bananos, lemons, citrons, oranges, pomegranates, cocoa, nuts, figs, and melons; there is some wine, cotton, and sugar canes, which they gather twice a year. The goats generally bring forth three or four kids at once, and that very often thrice a year. The chief merchandize is salt and goat skins, of which are made the best cordervants. They are called the Isles of Cape Verd, because they lie opposite to the Cape so called, being the western point of the island that lies in the mouth of the river Niger, formed by the north and middle branches thereof, called Senega, and Gambea; when they were first discovered (viz. anno 1440) by a Genoese, they were all desert, and so continued for thirty years, when they began to be inhabited by the Portuguese.

The island of Fogo, or of Fire, has its name from a burning mountain that is in it; it is most terrible to see (in the night especially) what prodigious flames and vast clouds

clouds of smoke it vomits up continually, which we could perceive afterward in a clear day, though we were above sixty miles distant from it.

Here I resolved, by the advice of the chief officers of the ship, to go into the port of Praya in the island of St. Jago, to take a fresh supply of water and provisions, but particularly to stop a dangerous leak in the bow of the ship, which she had sprung in a great storm that happened to us in the Bay of Biscay, where we were all like to have perished. Another consideration that moved me thereto was, that by recruiting here I might avoid touching at the Cape of Good Hope outward bound, whereby my passage would be much shorter. Accordingly on the 12th of November we anchored in the aforesaid port, which is in the latitude of fifteen degrees north, and the longitude of twenty-three degrees thirty minutes from London, having made my passage thither from the Downs in thirty days. I saluted the castle with five guns, but had no return; there was a small Portuguese ship in the road bound for Brasil; at our first coming she was jealous of us as we were of her, both supposing each other to be pirates, it being a place much frequented by such.

About a mile eastward of the port, is another bay so much like this, that without the following instructions one may be mistaken; but it is not by much so good a road; in the former bay you have the island of Mayo open off the east point of the bay, which in the port of Praya, is for some time shut in before you run high enough into the bay to anchor; and you have the top of the island of Fuogo over the west point of the bay, when you are in the port. I never was in this port before, but my chief mate, and several others of the ship's crew had been there; however, they were deceived, and steered the ship up the wrong bay, where they were like to have cast anchor before they perceived their mistake; but whoever follows the foregoing observation, can never err in this particular. During our stay here, which was five days, we caught with our nets and hooks a great quantity of fish, as mullets, beams, large craw-fish, and a fish called a foldier, being of a blood-red colour, having scales as large as half-a-crown, in shape like a carp, and some weighing eighty pounds; there is also plenty of several other sorts of fish.

The country is exceedingly pleasant, and abounds with all things necessary for the use or delight of man; but the natives are a poor, lazy, ignorant sort of people, prodigious thieves, and most of them as black as negroes or at least mulattos; by religion Roman Catholics, as they are told; but, God knows, their ignorance and stupidity is such, that they know little more than the name of religion. Their churches are meanly adorned, and as meanly built, not much exceeding our country barns; their houses are very ordinary, scattered here and there; here is the remains of an old decayed castle, very little of which is standing besides the wall, whereon are planted seven or eight old iron guns without carriages, which are of no defence, but serve only for salutes. The French with eighty or one hundred men took the island a few years ago, but abandoned it in a little time, having carried away what plunder they could find.

Here are great numbers of small oxen, hogs, goats, ducks, geese, and other sort of fowls, which the natives bring down to the port to sell, or rather to exchange for old cloaths, black cases, hats, knives, oil, butter, cheese, or almost any thing of foreign growth or manufacture, be it never so old or indifferent; for though the island be of itself very plentiful, yet their sloth is so great that they make no improvements; and their pride such, that if you ask a poor forry fellow (that has scarce the necessaries of life) who he is, he will immediately reply, that he is nearly related to some nobleman in Portugal; that himself or his forefathers were banished thither on suspicion, but  
very

very unjustly ; and to be sure he is some officer, for most of them are either colonels, captains, or lieutenants ; they are very nimble fingered as well as nimble footed, for whatever they can lay their hands on, they take, and then trust to their heels : they bring down their cattle tied either by the legs or horns with rotten cords, which as soon as they have sold and delivered to us, and received the price in either money or barter, they fail not to make some hideous noise and whistling at a distance, at which the cattle (that are already sufficiently frightened at the sight of a white face) begin to caper and bound about, until they either break the rope, or force it out of the hands of him that holds it, and immediately run up into the mountains from whence they came. Most of their fowls have bones as black as jet, and skins as black as the natives : but the flesh is as white or whiter than ours, and altogether as good, though not so pleasant to the eye.

I had the governor on board of my ship treat him handsomely, and gave him some guns ; he desired my company on shore, with some others belonging to the ship, that he might have the opportunity of returning the favour he had received. The next day we went to his castle ; he treated us, according to his slovenly manner, tolerably well, as we at first thought ; but soon after we found to our cost the effects of his perfidious banquet, by which we perceived ourselves to have been actually poisoned. As soon as we got on board, we took such antidotes as the surgeon (who was one of the guests, and fared no better than the rest,) thought most proper on such an occasion ; we felt the violent effects of our disaster for four or five days, being taken first with a most terrible vomiting and looseness, and afterwards with violent convulsions both in our bowels and limbs, and at last became raving mad ; the surgeon did not begin to vomit till the third day, but swelled in a prodigious manner ; after the fifth day we began to recover both our senses and health, but two lay languishing for several months during the voyage, and at last died. We had neither time nor power enough to revenge so execrable a piece of villany.

We took our departure from thence on the 16th of November, and made the best of our way towards the East Indies. On the 22d day, being in the latitude of eight degrees north, the meridian distance easting one hundred and eighty-one miles from St. Jago, we lost our trade-wind, and met with much rain, thunder, lightning, and a large rolling sea from the south. This day I tried the current, and found it set to the south-east and by east almost one mile in an hour. On the 3d of December I had an opportunity of trying the current again, being in the latitude of three degrees twenty-seven minutes north, and forty-five miles to the west of the meridian of St. Jago, and found it set directly the contrary way, viz. south-west by west about one mile an hour, which made a great difference in the reckoning of the ship's way, there being little or no variation of the compass here. The 10th of December, about eleven in the morning we passed the equinoctial one hundred and ninety-eight miles to the west of St. Jago. I should have acquainted you before, that in the latitude of four degrees north, we met the south-east trade-wind, (so called because it always blows between the south-south-east and east-south-east) which commonly holds to twenty-four or twenty-five degrees south, or sometimes much farther, and blows from within twenty or thirty leagues from the coasts of Africa, across that vast ocean, to within twenty or thirty leagues (and sometimes quite home) off the coasts of Brazil. This south-east trade-wind we meet within various latitudes, according to the sundry seasons of the year ; which from the best accounts, and my own observations both going and coming, I find to come near to the following table.

	d.	m.	
January, February, March, April, about	5	0	north
May	7	0	
June	8	0	
July	9	0	
August	10	30	
September	10	30	
October	8	0	
November	6	0	
December	5	0	

We steered away to the southward, keeping as near the wind as we could conveniently, without any thing remarkable till the 21<sup>st</sup> of December, when we lost our trade-wind in the latitude of twenty degrees fifty-two minutes south; and on the 30<sup>th</sup> we saw the sun to the north of us at twelve o'clock at noon, as in the European parts it is to the south. But notwithstanding the sun's being in or so near our zenith, yet the refreshing south-east gales make the weather cool and pleasant enough. Here I began to consider what quantity of water we had left, and whether sufficient to carry us through, without touching at the Cape of Good Hope; and upon examination I found about sixteen tuns, which I thought it silent. However we continued our course in order to get sight of the Cape, the better to regulate the future part of our reckoning; and accordingly, January the 20<sup>th</sup>, about six in the evening, I discovered from the deck the high land, called the Table Land, we being then about sixty miles distant. We stood in all night, and next day about four in the morning, by the false appearance of the high land up the country, the second mate, (who then had the morning watch) being wholly unacquainted with the coasts, ran the ship so far into the bay, between Penguin and Coney Island, that had I not turned out at that very time, we had all most certainly perished, there being a very great sea rolling on the shore, no wind to govern the ship, and no anchor ground. I ordered the boat to be hoisted out immediately, and the ship to be towed about; and a small gale of wind rising at the same time, it pleased God we got off safe. Here we met with a vast multitude of seals and large whales, that rolled and played about the ship, following her some distance from the shore; also a great number of fowls, and particularly a sort called alcatros or albotros, being a very large fierce bird, having feet like a duck, a crooked beak like an eagle, and a great quantity of feathers of the finest down. I shot several of them, and found some of them to measure fourteen or fifteen feet from the tip of one wing to the tip of the other, when extended. It would be too tedious to mention the great variety of other birds that are seen here, which therefore I will omit till my return, and pursue my design.

Accordingly this day at noon I took my departure from the Cape of Good Hope, bearing south-east by south, sixty-nine miles distance. We continued our course without meeting with any thing memorable, till the 25<sup>th</sup> of February, about which time we expected to discover the islands of St. Paul and Amsterdam; but were prevented by a most violent storm, which held us forty-eight hours, it being the most terrible ever I met with. On the third day the storm ceased, and the wind favoured us with a stout pleasant gale. On the 7<sup>th</sup> of March following, and in the latitude of thirty degrees thirty-five minutes south, and one hundred and twenty-nine miles to the east of the cape, we met the south-east trade wind again. On the 5<sup>th</sup> of April we made Christmas Island (so called from its being first discovered on that day). It is in the latitude

latitude of ten degrees, thirty-one minutes south, and is four thousand six hundred and eighty miles to the east of the cape. I found my own reckoning very good, because I fell in with the said island exactly to an hour's account.

This island looks exceedingly pleasant, being covered with lofty trees, and may easily be known by the following directions: — Coming from the north westward it appears pretty high, with a saddle in the middle; the westernmost land is the highest, trenching away to the northward to a low flat point; the easternmost point is low, but bluff. I founded within eight miles of the low point, but had no ground, though with one hundred fathom of line out: the island is about seven leagues from east to west. On the 6th of April I fell in with the island of Java about one hundred and twenty miles to the eastward of Java-head, and coasted till the 13th along the shore, which part of the island I find very well laid down in the English Pilot, though seldom navigated. That day I anchored under Mew Island, an uninhabited island in the Straights of Sunda, where we recruited from a town on the coast of Java, with wood, water and fresh provisions, particularly fowls, which are very cheap, twenty of the largest being generally sold for a piece of eight. Here is also plenty of tortoise, and many wild beasts, especially tigers. A few days before my arrival, the natives killed one that had the boldness to come to the very palisadoes of the town (that are built to keep off these wild beasts), and there destroyed a woman. The Javans are of a middle stature, tolerable good features, black complexion, long hair, and a very civil sort of people; they speak the Mallayo language. They will come off to an English ship (at hoisting your colours) five or six leagues to sea, in their small boats called praws, which generally are not above eleven inches over, and about twelve feet long. These boats bring off two or three persons with fowls, tortoise, eggs, and fruit of all sorts, whereof they have great plenty, and which they sell very cheap, or truck for knives, scissars, &c. We kept turning to the windward till the 20th of April, when we safely arrived at our first designed port of Batavia in the said island, being in all five months and seven days in our passage.

We spent here forty-two days partly in re-victualling and refitting our ship, the boltsprit being sprung, and the heads of our masts disabled: but the chief cause of so long a stay, was the barbarous and unchristian-like usage we met with (as all English subjects do) from the Dutch general, who refused to let us have any manner of necessaries, as wood, water, rice, &c. without which it was impossible for us to proceed on our voyage: neither would he grant any Englishman the liberty of lying on shore (the mornings and evenings being the only time in that hot climate to dispatch business) though he refuses not that privilege to the Portuguese, or any other nation of Europe. All our provisions and water we got off privately, and the latter in bulk in open boats without casks, which could only be done in calm weather. This stay gave me an opportunity of being able to give the short abstract following of that place; not but that, I know it has been described more at large by several, whose long residence there has given them a much better opportunity than my short time and hurry of business would permit.

The city of Batavia (so called from the Latin name of Holland) stands on the north-west end of the island, and is the principal place the Dutch have in the East Indies; where the general or chief governor resides, to whom all other Dutch governments in that part of the world are subject. It was formerly called Jacatra, when inhabited by the Javans: it is well built, and strongly fortified, having a stone wall, and a large ditch that surrounds the city; a citadel, with four regular bastions, which stands where Jacatra did formerly. Here the governor has a very handsome palace, the road



road secured toward the sea by some islands, is without dispute the best in all the Indies, being capable of receiving above a thousand ships at once, and having excellent good anchor ground. It is a place of very great trade, and much resorted to, especially by the Chinese, who come thither yearly, with a vast many junks laden with all sorts of China merchandize, as tea, quicksilver, vermilion in cakes, sticklack, camphire, copper bars, tutenague, fans, pictures, all manner of china, and lackered ware, foye, gumbodge, sago, and benjamin, with fundry other drugs and merchandises too tedious to name. A certain annual toll is imposed on the Chinese here for the liberty of wearing their hair, which brings in no small income to the government, they being much more numerous than the Dutch themselves. This liberty of wearing their hair is denied them in their own country (as I am informed) by the Tartars, who in the year 1643, having passed that prodigious wall four hundred leagues long, built between China and Tartary, conquered the whole empire in less than seven years. The Chinese are very proud of having this liberty, and many leave their own country, to live where they may be allowed it: the cutting it off being a mark of subjection, which the Tartars impose upon them.

The country is very flat all round the city, but exceeding pleasant, adorned with many curious seats, fine gardens, fountains, and large canals, which are let in, and run through several streets of the city, whereby it is rendered both neat and cool: on each side of these canals, are planted rows of fine trees, that are always green, which, with the beauty and regularity of the buildings, make the streets look very agreeable, so that I think this city, for the bigness, one of the neatest and most beautiful in the whole world. There are also two large piers, that run out about half a mile into the sea, and serve to drain all the canals and inland water that run through the city. They are likewise very useful for small vessels that lie along the piles, where they load or unload their cargoes. Above one hundred slaves are employed in taking up the mud, and in scouring the space between these piers, which otherwise would soon be choaked up with what is washed out of the city and country. At the mouth of this place are many alligators or crocodiles; and if a dead dog, or any other carcase comes down the stream, it goes not far to sea, but is immediately devoured by them. Yet, which is very strange, I have seen the natives naked up to the middle in the water netting for shrimps among those monstrous creatures, and they are seldom hurt by them.

I cannot omit mentioning here, how narrowly we escaped a hellish plot, formed by some of our own ship's crew. On the 29th of May following, my gunner, and about twenty-two of the seamen, went in the long boat to Father Smith's island to do some business for the ship: in the interim, I sent the gunner's mate down into the powder room for a gun-case; where, to his great surprise, he found both the doors open, (the staple of the outer door being drawn) and discovered a lighted match, laid on a dried horse hide (doubtless by some of those that were gone ashore, as shall appear more fully hereafter) to a largetrain, and the train continued to fix barrels of powder which if he had not then by good fortune gone down, must have taken in less than a quarter of an hour, and destroyed us all. He had presence of mind enough to slide one of his hands gently under, holding the other over to hinder the powder dust from rising, and withdrew the match from the train, which was so large that he could take the power up by handfuls. This unaccountable piece of villainy (neither the author or cause being known) did greatly astonish us. I used my utmost endeavours to find out the bottom of it: after securing the powder room, I took the key myself, and impatiently waited the long boat's return, which did not come back till evening: in the mean time I loaded some pistols and blunderbusses, and lodged them that night in the



great cabin, where I passed the night with several others whom I might confide in, and placed a trusty centinel at the door; neither did we go to bed, but lay down in our cloaths by turns, imagining that those persons who could be guilty of so wicked a design, would not stick at any treacherous means to murder us. The next morning I called together all the ship's company upon deck; and the better to discover the conspirators, I gave all the promises and assurances imaginable, that if any one would make a discovery of the truth, he should receive fifty pounds reward, and all the protection I could give him. I tried them likewise by separate examination, but all to no purpose, every man seeming equally surprized: and seeing that my best endeavours to bring this affair to light were unsuccessful, I was obliged to pursue my voyage with those people on board, more dangerous than even the very Indians I was going to, among whom the English were so ill-used lately. Accordingly on the 2d of June I set sail, in company with the ship *Borneo*, Captain Thomas Lewis commander (bound to the same place, and on the same account, in the service of the Honourable East India Company), and also with the ship *Daulbin*, Captain Boodum commander, belonging to Maderass, who was bound on a trading voyage. We sailed together along the north coast of Java.

In this time of the year the winds between this coast and Borneo, as also along the coast of Sumatra are always easterly in the offing, and are called the easterly monsoons; but near the shores there are land and sea breezes; the land breezes come off in the morning about one, two, three, or four o'clock, generally with a small shower, a gust of wind, or sometimes thunder, which gives always a timely warning. Then we weighed anchor and kept the wind, which sometimes would run us a great way along the shore; but as the day came on, the wind turned always more about to the east, and would run us out of sight of land by noon or thereabout, at which time it grew generally calm. Then we anchored in the offing with a stream-anchor in twenty-five or thirty fathoms water to hold our own, lest the current should carry us to the westward, till about one or two in the afternoon, when we had a fresh gale of wind right from the sea, with which we made such slants in towards the shore, that we might be sure to get so near land as to anchor in about four fathoms water before the sea-breeze was past, otherwise we should lose much of the benefit of the next morning land-wind. This method of turning along the shore is very pleasant, by reason of the certainty of the winds and fineness of the weather; by which means I had the opportunity of having an exact view of the coast, which is very agreeable, being always green; and when the land-winds come first off they bring with them a most delicious smell. This coast abounds in all sorts of provisions, whereof great quantities are carried to Batavia, especially from the north-east part, where there is most plenty. There is no port of note from Batavia till you come to Charabon, which is fifty-six leagues to the east of it: but you see Samarang, Japara, and Roombong, places where the Dutch have settlements: at the last they get great quantities of oak for building, but I think it much inferior to our English oak. These parts also afford great plenty of rice, salt, sugar, white sugar-candy, tamarinds; and as for other provisions, there are oxen, goats, eggs, ducks, and almost all sorts of fowls, &c. Wherever you see a grove of cocoa-nut trees (which abound here) as you sail along the shore, there you are sure to find a small town of the Javans, who are very civil, and will supply you with what you please of the produce of their country, at a much cheaper rate, and with much more humanity than the Dutch.

I was informed that the Dutch government reaches no farther than a place called Soorobaya, which is a small pleasant village of the Javans, where I touched and bought some provisions; but it is no good place to water at. I will not trouble you with the description of it (nothing here being remarkable) but proceed to a place  
called

called Arabaya, on the island of Madura, that lies on the north-east end of Java. It is a place very convenient both for victualling and watering, and the inhabitants are a very civil people.

The town stands on the north-west end of Madura, about eight leagues from the westernmost land, about a quarter of a mile up a small river, which lies to the westward of the first large and most north point of land; though in all the sea-charts that I ever saw it is laid down to the eastward of the point: it is at the bottom of a deep bay, in which you may anchor, but more commodiously off the point. You cannot miss your way into the river, because there are stakes stuck on both sides of the channel for a quarter of a mile out to sea. In the dry season it affords water sufficient at half tide for a large long boat laden to go over the bar, and in the rainy season at low water. When I was there, I saw two Chinese, who called themselves Shabanders, which signifies governor of a port, and were very servicable in keeping the natives in subjection, and managing the whole trade of the place. The town is large, and the pleasantest I have seen belonging to the Javans. On the muddy banks of the river, at low water, are great numbers of alligators, and variety of sea-fowls; we shot several of both kinds, they suffering us to come very near them.

The 14th of June 1714, we all anchored under the little island of Carimon-Java, Captain Boadum's cargo being partly saltpetre, we agreed with him for fifteen tons a piece, the better to enable our ship to make sail when laden with pepper: but when we came to pay for it we soon found the reason of the black design hatched against us in the road of Batavia; for having called for a certain small chest of the Company's treasure, containing about five hundred pounds sterling, to our great surprise it was not to be found; and notwithstanding all the strict search and enquiry we made among the ship's company, we could hear nothing of it. We sent for another chest, which when brought we opened, and found upon examination half the money gone which it should have contained according to the invoice; so that what was missing of this, with the other entire chest, amounted to near one thousand pounds. This made the case plain, that whoever stole the money, the same were the persons that attempted to blow up the ship, with all those that had not a hand in their villainy, that there might be nobody left to call them to an account; as it has often happened that thieving servants, when they have robbed their master's house of plate or money, set it on fire in the night, and if they can, burn the whole family in order to cover the theft. This was a heavy misfortune, and particularly affected me, being the first time I ever had the honour to serve the honourable East India Company. This villainy would not have stopped here, but would have been of farther evil consequence, had it not been prevented, as shall appear hereafter.

However, we paid Captain Boadum; and having weighed anchor the 17th in the evening, we parted with him, and made the best of our way towards the port of Banjar Massen, where we arrived the 29th of June at twelve o'clock at night, and anchored in the road without the bar, called Tonberneo, in eight fathoms water. At five next morning we held a consultation, and agreed to run over the bar a little way up the river, where we might have a better opportunity of proceeding on our designs; which I accordingly did, keeping the little island of Poolo-Cocket open off the east point of the river half its breadth. I came to anchor at twelve at noon about a quarter of a mile within the river's mouth, in four fathoms and a half water, over against a river called Biajo small river. The Borneo had not so good fortune as we in getting over the bar, for she stuck fast aground until the next tide, when she got off and came to anchor just by us.

CHAP. II.—*A Description of the Island of Borneo; of the Inhabitants, Manners, Customs, Product of the Country, &c.*

THE island of Borneo, so called from a city of that name, lies on the north of Java, and on the east of Sumatra and of the peninsula of Malacca. It is situate between seven degrees thirty minutes north latitude, and four degrees ten minutes south, under the equinoctial, which divides it into two unequal parts, seven degrees thirty minutes lying northward of it, and four degrees ten minutes southward; so that it is in length seven hundred miles, in breadth four hundred and eighty, and in circuit about two thousand. It is counted the biggest island, not only in the Indian Sea, but in the whole world, except perhaps California in the South Sea.

The air, considering the climate, all round the island along the sea coast is pretty temperate, because of the refreshing sea-breezes that blow always about eleven in the morning on the south parts, otherwise the heat would be insupportable; but it is very unwholesome because of the moistness, in the south parts especially. For about the river of Banjar Masscen, many score miles near the sea, the country looks like a forest, being full of prodigious tall trees, between which is nothing but vast swamps of mud. At high water you may sail in a great way among these trees in several places, but at low water it is all mud, upon which the sun, especially in the equinox, darting his scorching beams perpendicularly, raises noisome vapours, fogs, &c. which afterwards turn into most violent showers, that fall more like cataracts than rain, and are very cold, being followed generally by cooling winds; so that the weather changing suddenly from scorching heat to chilling cold, causes the air to be sickly and unhealthful. In the beginning of the rainy season there is no sleeping for the noise which the frogs make, whereof there is a vast multitude in these swampy woods; and a great number being left, with their spawn and other slime and filth on the mud, when the dry season begins (which is commonly in April, and holds till September) they die, and the carcasses lie rotting, and occasion a very noisome stink and corruption in the air. During all this dry season the wind is easterly between the south coasts of Borneo and the Isle of Java; and this is by much the more healthy part of the year; but from September, or thereabouts, to about April, the westerly winds reign, with violent storms, prodigious rain, thunder and lightning almost daily; for during this season it is rare to have two hours of fair weather in twenty-four on the south coast of this island; and though the other season is so fair, yet you are sure to have a shower for about an hour every day at the coming in of the sea-breezes, which cools the air, and makes it very agreeable.

The country abounds with pepper, the best dragons'-blood, bezoar, most excellent camphor, pine-apples, pumble-noses, citrons, oranges, water-melons, musk-melons, plantains, bananas, cocoa-nuts, and with all sorts of fruit that is generally found in any part of the East Indies. The mountains yield diamonds, gold, tin, and iron; the forests honey, cotton, deer, goats, buffaloes, and wild oxen, wild hogs, small horses, bears, tigers, elephants, and a multitude of monkeys. Here are small hog-deers (the feet of which are often used for tobacco stoppers, when tipped) which they catch in this manner: when they find the track of these creatures, they dig square holes in the earth, about five feet over and four feet deep, which they cover over with a little straw, or such like, and sift some dust thereon, so that the hog-deer in passing over falls in. The monkeys, apes, and baboons are of many different sorts and shapes; but the most remarkable are those they call Oran-ootans, which in their language signifies men of the woods: these grow up to be six feet high; they walk upright, have longer arms than men,

tolerable

tolerable good faces (handsomer I am sure than some Hottentots that I have seen) large teeth, no tails, nor hair but on those parts where it grows on human bodies; they are very nimble-footed, and mighty strong; they throw great stones, sticks, and billets, at those persons that offend them. The natives do really believe that these were formerly men, but metamorphosed into beasts for their blasphemy. They told me many strange stories of them, too tedious to be inserted here. I bought one, out of curiosity, for six Spanish dollars; it lived with me seven months, but then died of a flux; he was too young to shew me many pranks, therefore I shall only tell you that he was a great thief, and loved strong liquors; for if our backs were turned, he would be at the punch bowl, and very often would open the brandy-case, take out a bottle, drink plentifully, and put it very carefully into its place again. He slept lying along in a human posture, with one hand under his head. He could not swim, but I know not whether he might not be capable of being taught. If at any time I was angry with him, he would sigh, sob, and cry, till he found that I was reconciled to him; and though he was but about twelve months old when he died, yet he was stronger than any man in the ship.

As to the birds, I met with none such as we have in England, except the sparrow. Here are parrots and parroquets of various sorts and sizes, from the bigness of a bulfinch to that of a raven; particularly a sort, called by the Banjareens luree, that are brought hither by the Macassars, which they so much admire for their beauty, docility, and sweet smell, that there are few houses without one of them; they give sometimes six or seven pieces of eight for one; I bought several, but the cold weather at sea killed them. Here are such vast multitudes of bats, that at particular times (viz. just before the setting in of the westerly monsoon) towards evening I have seen the sky almost darkened by them, when at Tatas, flying from the west towards the east for the space of two hours. I shot one in the woods, whose body in shape, colour, and smell was like a fox, having head, ears, and teeth, &c. as big as a young one: the wings when spread, measured, from the tip of the one to the tip of the other, five feet four inches.

The rivers and the sea coasts afford plenty of fish, as mullets, breams, &c. a sort of fish called cockup, the best tasted foreign fish I ever met with; and many other sorts which we have not in Europe, particularly the cat-fish, which is much esteemed by the natives, but seldom eaten by the English. I think the flesh of the young ones is of a tolerable relish, but very luscious. There are some of five or six feet long, they have no scales, their heads are large, not unlike a cat's head, having barbs very like a cat's whiskers. The river Banjar dischargeth its waters into the sea, in the latitude of three degrees eighteen minutes south. It is remarkable, that at the latter end of the dry season, when the springs are low the water is of a brackish taste up as high as China river; at which time the cat-fish follow the boats in great numbers, and getting under the bottom of them make a dreadful groaning; it surprised me much at first. In this river are caught prawns generally six or eight inches long; also very large rock oysters at a little island called Pooloobattoo.

The natives are of two sorts, viz. those that inhabit in or near the ports of trade (as particularly the Banjareens), and the inhabitants of the inland country; for the former are of a middle stature, rather under than over, well shaped and clean limbed, being generally better featured than the Guinea negroes: their hair is long and black, their complexion somewhat darker than Mulattos, but not quite so black as the aforesaid negroes; they are affronted if you call them black men. Both men and women value themselves in a particular manner if they are whiter than ordinary. They are very weak  
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of body, which is occasioned chiefly by their lazy unactive life, and mean diet, not having the opportunity of walking, or of any land exercise, and working seldom, but are always in a sitting posture, either in their boats or houses; neither do they stir without it be out of absolute necessity. They used to laugh at us for walking about in their houses, telling us that it looked as if we were mad, or knew not what we did: "If," say they, "you have any business at the other end of the room, why do you not stay there; if not, why do you go thither; why always stalking backwards and forwards?" If the Banjareens have but a quantity of rice and salt, they think themselves very rich; for if they throw a casting net at their door, they need not fear the want of a dinner, so great abundance of fish is in that river.

The women are very little, but very well shaped, having much handsomer features and better complexion than the men; they walk very upright, and tread well, turning their toes out, which is contrary to the purchase of most Indians. I believe it is a custom forced upon them by their walking on the logs that float upon the river before their doors from house to house, as I shall explain more at large by and by. They are very constant when married, but very loose when single; neither is her former compliance counted a fault in a wife; and the mothers do often prostitute their daughters at eight or nine years of age for a small lucre. They generally marry at that age, and sometimes under; but as they are soon ripe for matrimony, their fertility soon decays, for they are generally past childbearing at twenty or twenty-five; it is rare that a woman holds till thirty. They live to a tolerable good age, and use daily bathing in the rivers, and are expert swimmers. Every day whilst we remained at Tatas we saw the river full of men, women, and children, even some in arms, which they carry in for health's sake, to which this way of bathing must needs be very beneficial and refreshing in so hot a climate.

In burying their dead they take care to lay their heads towards the north, and put into the grave with them a great deal of camphor, and several things necessary for the support of life; for what end the camphor is deposited there I know not; but the latter is according to an old Pagan custom, that has been handed down to them, as believing that those provisions were useful to them in their journey to the other world: but now being Mahometans they say they do it only as a mark of respect. They carry them in boats as near as they can to the burying-place, attended by their friends in great order and ceremony, being dressed all in white, with lighted torches in their hands, though it be in the day time.

The inland inhabitants are much taller and stronger bodied men than the Banjareens, fierce, warlike and barbarous. They are called Byajos, an idle sort of people, hating industry or trade, and living generally upon rapine and the spoil of their neighbours; their religion is Paganism, and their language different from that spoken by the Banjareens. They go naked and only have a small piece of cloth that covers their private parts; they stain their bodies with blue, and have a very odd custom of making holes in the soft part of their ears when young, into which they thrust large plugs, and by continual pulling down these plugs the holes grow in time so large, that when they come to man's estate, their ears hang down to their very shoulders. The biggest end of the plug is as broad as a crown piece, and is tipped with a thin plate of wrought gold. The men of quality do generally pull out their fore teeth and put gold ones in their room. They sometimes wear, by way of ornament, rows of tigers' teeth strung and hung round their necks and bodies. Those of them that were subject to the Sultan of Caitangee (whom I shall have occasion to mention often hereafter) are now in rebellion

bellion against him ; he that headed them made pretences to the crown, and was set up by these mountaineers against the present Sultan, to whose government they are very averse, who was chosen by the general consent of the people, at least of the civilized trading part of them. But this pretender, before I came away, was dispatched by poison. However, some of these people, viz. those that live near the ports of trade, are in subjection to their different Kings or Sultans ; the others live in clans by themselves, without Kings, or any form of government. I have seen some of the former come down the river to the port of Banjar Masleen in very ill-shaped prows ; and bring down gold dust, diamonds, bezoar-stones, rattans, and sundry other merchandises. The Banjareens will not suffer the Europeans to have any acquaintance or trade with them, but do purchase the goods from them, which they sell to us at a greater price. And I do verily believe, that the many frightful stories they tell of those people's barbarity and cruelty, are only invented on purpose to deter us from having any acquaintance or commerce with them, which would be a great disadvantage to the latter ; though some of these reports may be true : as to their women I never saw any of them, and so can give no account of them. The island is divided into different kingdoms, having their particular Kings or Sultans, whom they call Rajas.

There are in this island four chief ports of trade, viz. the city of Borneo, situate on the north, in the latitude of four degrees thirty minutes north ; Passeer on the east side, in the latitude of one degree fifteen minutes south ; Succadana on the west, in the latitude of fifteen minutes south ; and the port of Banjar Masleen on the south, in the latitude of three degrees eighteen minutes south. Here was formerly a town called Banjar, about twelve English miles from the sea, built partly upon floats of timber, partly upon stilts ; it was near it the English factory was established, but there is not so much as the remains of a town to be seen now, the inhabitants having removed to other places, but most to Tartas or Tatas, a city about six miles further up the river. As to the three former I can give no particular account of them from my own observation, but by what I learnt from the Banjareens. As to the last I shall be very particular, all that I shall mention touching it being of my own knowledge, and have taken more pains than ordinary that I might be more capable of informing the Honourable East India Company of the methods that may be used in order to settle a trade there : and I dare say, no person ever had a greater opportunity of knowing those matters than myself. I shall only say that there are several Kings or Rajas in the inland country ; as also the cities of Borneo, Succadana and Passeer have each of them one ; that formerly all the other Rajas (as well as he to whom Banjar Masleen belongs) were subject to the Raja of Borneo, who was a supreme King over the whole island ; but now his authority is mightily decreased, and there are other Kings equal, if not more powerful than himself, particularly the Sultan of Caitangee. His name is Pannomboang, and styles himself Sultan of Caitangee, which is the city where he resides, situate within one hundred miles of the port of Banjar Masleen. His brother is another King, and styles himself Sultan of Negarree, a city about three hundred miles up the main river, where he resides. But the former is the greatest, by reason of the trade and the customs he receives from this port, which may be computed to amount to six or eight thousand pieces of eight per annum. But I think I have said enough of these general matters, and it is time to give an account of our particular proceedings after our arrival in the river.

After we had cast anchor as aforesaid, we espied a small praw or boat under the shore ; we sent in a very civil manner to the persons that were in it, and intreated them

them to come on board. We lay then with our English colours flying, at which they were much surprized, knowing how severely they had used our countrymen, when last among them. However, partly through fear, and partly through our kind invitation, they came on board. They were very poor-looking creatures, that had been at Tomberneo, and were returning to Tatas. We expressed all the civility imaginable towards them, gave them some small presents, and desired that they would acquaint their King or grandees in the country, that there were two English ships come to buy pepper of them; that we were not come to quarrel, but to trade peaceably, and would pay them very honestly, and comply with all reasonable demands according to what should be hereafter agreed on. They inquired whether we were Company ships, to which we did not readily answer them; but before we did, they proceeded and said, that if we were, they, as friends, would advise us to depart the port forthwith, because their Sultan and their oran-cays, or great men, would by no means have any dealings with us. We designed to have sent our boat that night to their town called Tatas, which is about thirty miles above the place where we lay, that she might arrive there by day-light the next morning; but those persons dissuaded us from it, assuring us that we should soon have news from their Sultan; and that some of their men would not fail to be down with us the next day. Then they took their leave of us, returning us many thanks for our presents.

The next day came on board of us a boat, with one Cay Rouden Tacka, and Cay Chetra Uday, being messengers from the King. We received them as civilly as possible. The first thing they inquired, was whether we were Company ships, or separate traders; that if the former, we need not wait for an answer, and that it would be our best way to be gone; desiring earnestly that what answer we should return them might be sincere; for that whatever we said to them should be told the Sultan. Finding no other method to introduce ourselves, we were forced to assure them that we were private traders, and came thither on our own account to buy pepper. This we did, believing we might in time have a better opportunity of making our honourable matters known, and of excusing the heavy crimes laid on their former servants, whose ill conduct had been the cause of the factory's being destroyed. They asked us why we came thither rather than to any other place, since our countrymen had so grossly abused them? We answered, that we were strangers to that affair; and that at first we designed to go to Pallambam; but being informed that pepper was much cheaper here, we were willing first to try this market. They also inquired what number of men and guns we had, and cast their eyes slyly about to endeavour to guess of what strength we were; for they are exceeding jealous of all Europeans.

Towards night they departed, and we gave them some guns. They left two persons on board, with whom they desired that our linguist would come up to the town the next day, to give answer to such other questions as might be asked. We gave instructions to our linguist to tell them, that we were two small separate stock-ships; that we were informed at Batavia, that pepper was very cheap at this port, so chose rather to come hither than to Pallambam: we ordered him to learn on what conditions they would offer to trade with us, and who were the properest persons to apply to; to press a speedy meeting: and if they asked what we had to purchase pepper with, to tell them Mexico pieces of eight, (for the pillar-dollars they will not take); to give them kind invitations to come on board; to write down all questions and answers: and if any thing of consequence should be further asked, to give no assurances or answers of themselves, but to plead ignorance, and to refer all to the merchants, (for  
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to they were to call us, and not supercargoes, which would have created a jealousy that we belonged to the Company;) to take care to keep the sailors sober, and in good order; with some other instructions less material.

Having given them these general directions, we sent them away the 2d of July at two o'clock in the morning. One of the linguists was an Englishman, the other a Javan, whom we hired at Batavia; but we put most confidence in the first. They returned that very night, and told us, we should have an answer in seven days from the Sultan of Caytangee, and in eleven from the Sultan of Negarree. They also brought us a caution from the Banjareens to beware of some large pirate praws manned with about a hundred of the Byajo men, that lay skulking thereabouts. But before this advice came, we were like to have felt some of the cruel effects of their barbarity through our own inadvertency: for that day about noon we saw three large praws under the shore, which had shot up the river a little above our ships: whereupon, imagining they were Banjareens, and hoping to get some better information in relation to trade, I went into the long-boat in company with Mr. Bartholomew Swartz, chief supercargo of the Borneo, Mr. John Beacher, chief supercargo of my ship, and Mr. John Gerard, our assistant and purser, with five men and a boy. We carried only two muskets, and a small fowling-piece, with two cartouch-boxes; but had we thought of meeting with such barbarians as we did, we should have been much better provided. We hoisted our sail, and stood towards them; but they rowed with all their might from us; and finding we were like to come up with them, they ran their three vessels up a creek among the trees, which were exceeding thick, hanging over the water, and gave so great a shelter that there was no wind for us to sail up the creek after them: however, we made in, thinking they were bound no further. But being come close to the mouth of the creek, we saw their praws a little way up, and no men in them: for they, being about a hundred in number, were got ashore among the trees, designing to draw us in, and destroy us all; which they might easily have done, had they all equalled the courage and resolution of their leader: for the creek was not above ten yards over, and they exceeded us in number above ten to one, being armed with javelins, sampits, and poisoned arrows. We called aloud, and asked them what they had to sell, with some other questions, but received no answer till we were got up into the creek; when on a sudden we heard a horrible shout, after the manner of these barbarians; and at the same time their captain advanced boldly towards the boat, threw a javelin at us, and immediately after shot an arrow. It was fortunate for us that his men were not so forward, and seemed dismayed, keeping back among the trees, but let fly a shower of their poisoned arrows among us, which however did us no damage. We immediately put ourselves in a posture of defence, and presented our small arms, but were at first unwilling to fire, lest such a proceeding should frustrate our design of trading in the port. But seeing no other remedy, and perceiving by their dress and language that they were not Banjareens, we discharged our pieces at them, which put them to flight, scouring in among the trees; though even in their retreat they ceased not to let fly their arrows at us, after the manner of the antient Parthians. Whilst Mr. Gerard was loading our guns again, we used our pocket-pistols, firing wherever we saw a bush wag. In the meantime the sailors were in great confusion, but not idle, haling the boat by the means of the boughs and shrubs, until they got her out; before which we had discharged our pieces a second time. But we saw no more of these villains, they being frightened at the noise, and danger of our fire-arms. We were not a little pleased at our narrow escape. What loss the enemy had we know not; but our good fortune brought us off without so much as one wound. We

brought away some darts that stuck in the side and sail of our boat. These people go naked, having only a chawat, or small piece of cloth, about the breadth of a hand, to cover their privy parts. Their bodies were all over stained with blue; and they seemed to be strong, tall men, like the mountaineers spoken of before.

We remained on board without any further answer until the 6th of July, when Cay Rouden Taka, and Cay Chetra Uda came on board. They brought us presents of fruit, fowls, eggs, &c. which we had rather been without, knowing that our return for those trifles must be expensive, though we were too often troubled with such mercenary civilities.

They told us, that the Sultan's pleasure was, that we should come up to Tatas to hold a bechara, or consultation, with Pangarang Purba Negarree, or Prince of Negarree, (who is a Prince of the royal blood) promising that they would stay as a pledge till our return. Whereupon the other supercargoes went away on the 7th of July, about eleven in the morning, Captain Lewis and myself remaining on board to entertain those grandees. When they arrived at Tatas, they were introduced to the Prince; who, upon enquiry, understanding that they were not the captains, he ordered them to bring us along with them to the next consultation. He examined them strictly whether we were separate traders; which being affirmed, he said, that we were welcome; and asking what quantity of pepper would load us, he was answered four or five thousand peculls. We had presented him with an extraordinary good silver watch, and in return he promised mighty services; but at the same time told them, that the Sultan being now at war with the rebels, who inhabit the pepper country, that commodity was grown very dear; therefore he could not come to an exact price, nor sign a contract, because the Sultan's great seal was not there, with which all such contracts are signed. It is remarkable, that no business can be done in those parts, nor scarce admittance gained to any of their great men, till he understands by his servants that the person is not come empty handed.

The next evening the supercargoes came back, and on the 11th the aforementioned Cays returned on board, and desired us to go with them to the Prince. They stayed with us that night, and we made them very merry; for though it be against their religion to drink strong liquors, yet we soon perceived that they were no enemies to arrack or wine. The next day I set out about two in the morning with the other supercargoes; some in mine, and the rest in the Borneo's pinnace; having ordered my two trumpeters to attend us, that we might appear with more advantage.

We went up the river for about twenty-two miles, where we turned off into a narrow branch of it. This river is extremely pleasant, being about twice as broad as the Thames at Gravesend, having a vast number of prodigious tall trees on each side that are always green. I remarked here four very agreeable islands at some miles distance one from another, each being situate about the middle of the river. The first is called Poolococket, being covered with trees, some of which are of a vast height. You may see it before you enter the river, and it serves as a land-mark to sail over the bar. There is a large sand spits out all around it, but shoots itself out farthest at the north and south end, which must be carefully avoided; for if a ship ground, the ebbs are so very strong, because of the land-waters, that it might wring her to pieces; besides, great drifts of trees come down the river continually, which in such a case would be of ill consequence. Besides, it is somewhat dangerous, because of the often shifting of the sand: the best advice I can give is to anchor any where about a mile or two within the river's mouth, where the ground is clear, and water enough from side to side: then send your boat to sound off the aforesaid island, and buoy it; which after you have passed,

passed, keep the starboard shore on board within your ship's length ; or, if you please, nearer, at any time of tide, but best on the flood ; for the ebbs run so strong in some seasons, that for want of wind, which the trees keep off, you will find it very difficult to get a-head when you come to open the first river on your starboard side, which is pretty broad, and is called China river as you go up. You must sheer off towards the middle, to avoid a spit that shoots out from the larboard entrance of that river's mouth ; but you have gradual soundings.

The tide flows here but once in twenty-four hours, and that always in the day-time ; in the spring-tides the water rises about twelve feet ; but in the night there is only a kind of stagnation of the water when the tide comes in, and never rises above half a foot, unless it be in very dry weather : the reason is, that besides the strong current of the inland waters, the land-winds, which blow always in the night with more vigour than at other times, make so great a resistance that the flood cannot rise to any considerable height.

This river China runs up as far as the town of Tatas, and is navigable not only thither, but a considerable way farther for the biggest ship in the world. All the China junks go up the said river, and from hence I suppose it has its name. All other ships that will go up so far must take the same course ; but our ships lay higher up the main river, over against the factory, which was at the entrance of another river, smaller than the former, and which you meet next on the starboard side also as you go up : it is called Tatas Small River ; between which place, if you keep nearest the starboard side, there is no danger. We passed China river about nine or ten in the morning, and about eleven got to the small river last mentioned, which is much the nearest way for small vessels or boats. It was no little diversion to us in our passage, to see the prodigious multitude of monkeys and baboons of all sorts that swarmed on the trees on each side of us ; several with their young ones hanging about their necks. We shot many of them ; but at the report of a gun they make a terrible bustle with their jumping and scouring from tree to tree : they would shake off their young ones, and make the woods ring and echo with their loud squealing ; the sound of our trumpets had the same effect on them. The natives never hurt them, which makes them so void of fear, that they will let you come very near them. We saw many alligators sunning themselves on the mud, several of which we shot at, but to no purpose.

We had eight miles to go up this river, which is very crooked, where the scorching heat of the sun would have been as troublesome to us as these sights were diverting ; but it being narrow, and the trees wonderful high on each side, we were pretty well shaded from the heat. - We could not see the town till we were just entering into it, because of the tallness of the trees that stand close together. It consists of about three hundred houses, most of them built on floats in the river, which is here about a hundred yards over ; but the houses of the poorer sort are built on stilts in the mud on each side. The owners are forced at high water to make use of boats to get into the houses ; and at low water they have large logs that lie from house to house, on which they walk. The houses on the floats are built on vast logs or trees laid and trunneled together, or bound strongly with cables made of rattans, and fastened by the like cables to the trees on shore, and to one another. Each house consists only of one floor, divided into sundry apartments, according to the family ; the sides being only split bamboo plated cross-wise ; and they are thatched on the top with cajans, much after the manner of the Javans, and other Malaysians. Though these houses are tolerably high for the sake of air, yet the eaves hang over the sides within five feet of the logs

or stage they are built upon, to keep out the sun. Here runs a very strong ebb, which sometimes breaks their moorings, or what fastens them to the shore; and you may see three or four houses adrift at a time. I have been informed, that some houses having broke loose in the night, whilst the people were asleep, drove out into the main river, and thence to sea; which is very probable, because the flood sometimes runs very weak, when, on the contrary, the ebb is exceeding rapid and strong.

When I first got into the town, I was surprised to see these floating houses, and the people in great numbers paddling up and down from house to house in small but neat built canoes or praws. The curiosity of seeing us had brought a great many to town from all parts of the country, which caused it to be more crowded with people and boats, than it had been in many years before. On our first entrance I ordered the trumpets to sound; the fine echo from the woods and waters added to the harmony of our music. Most of the natives were astonished at the sudden noise, and some fled one way and some another in their little boats, with all the confusion of a frightened multitude. The number of ugly black ferry men was so great, the stink of the oil or ointment wherewith they besmear their bodies daily so noisome, and the sultry heat so excessive, that I had almost persuaded myself I was passing the river Styx, or Phlegeton in Hell. We were conducted to Cay Arrea's house, who is the principal trader in town, but not a very strict observer of justice, and was afterwards introduced into the Prince's presence, who sat cross-legged at the upper end of the room, with Cay Arrea on his left, and Cay Demon on his right. There was also the chief of the Chinese, who lives there, and is a very considerable trader, besides several other great men. We were ordered to sit down cross-legged, just opposite to the Prince; which we no sooner did but the house was immediately filled with other Indians of the meaner sort, who sat down behind us; so that we were almost stifled with heat, and the stench proceeding from their abundant perspiration. Our crew waited with the pinnaces at the door.

The Prince, with a very reserved countenance, after a profound silence, spoke first to us, and let us know that they had great reason to be jealous of all Europeans; and that the Sultan did insist that we should bring up our ships into the narrow river, or even into the town, as a security for the safety of his subjects; and that it would forward our loading, and be other ways advantageous. We excused it in the handsomest manner we could, telling him that our men being used to a colder climate, could not live in that warm situation without the sea-breezes. This indeed was one reason; but the chief was, that if we should comply, we must be subject to their power to use us as they pleased, should they at any time discover that we were Company ships, by way of reprisal, and in revenge for the injuries they complained to have been done by our former factory; and knowing that they were as willing to take our money as we their pepper, we absolutely refused to yield to that proposal; and told him, that we would return to our ships, and stay three days for an answer, but no longer. We discoursed on divers subjects for about three hours: and when we were about to depart, the Prince desired our longer stay, because the Sultan had given strict orders to Cay Arrea to entertain us whenever we came very handsomely at his charge. And immediately several large gold and silver bowls neatly wrought were brought in full of rice, boiled fowls, hard eggs, &c. We eat plentifully, and drank our own wine and punch; their best liquor being the river water that runs before their doors. After we had done, what was left was given to our boat's crew in brass bowls. The Prince, while we were at dinner, withdrew, and dined by himself; after which he came in again. He was dressed after their manner, in scarlet and blue, having on a small

small close-bodied waistcoat, without a shirt, and over that a chawat, wrapped round once or twice, that hung down to his knees; he wore drawers, but his hands, legs and feet were bare. On his left side, in a neat belt stuck a creice or dagger, richly set with diamonds; before him was a table about two feet long, and one and a half broad, of solid gold, much like a hand tea table; on which always stood his furniture for his betle nuts, seree leaves, and lime, which he chews continually; as it is the custom for men, women and children to do in that country, and to smoke tobacco. The box that held the nuts was not unlike a rummer, with a cover to it; that for the leaves like a standing snuffer-case; and that for the lime was a small, round, flat box, all of the finest gold, very neatly wrought in filigreen, and set with large stones, some diamonds, and others that I knew not.

Having resolved not to bring our ships up, nor to stay longer than the time we mentioned, we took our leave about four in the afternoon, and the same night we arrived on board, being extremely fatigued. On the 13th we sailed up the river about twenty miles, and anchored over against the mouth of China river.

On the 16th came on board the same messengers from the Prince, and signified, that he desired to speak with us again. We feigned an indifferency, and told them, that we were then ready to depart, since we could not agree. We soon perceived that this news did not please them. However, we told them, we would go up once more; and accordingly next day early in the morning we set out, and arrived there about two in the afternoon. We were again introduced to the Prince; and after several hours discourse, we over-ruled the proposal of bringing our ships up to town; and only complied with his request of taking a house in town, where the supercargos should reside, receive and pay for all goods on the delivery of them. But as their demands and expectations of presents were very exorbitant before they would sign the contract, or agree with us, they demanded and insisted on twenty firelocks, and two barrels of powder, telling us what a mighty service it would be to their Sultan towards reducing the rebels, and obliging them to bring down great store of pepper, which they had hoarded up, and would soon enable them to load our ships, and that they would pay us any reasonable price for them. When we had agreed to this point, and thought that all matters had been agreed on, there arose another difficulty, viz. to pay a sooco, or quarter part of a dollar custom for every pecull of pepper (which is one hundred and thirty-two pounds) that we should buy. After many debates we were forced to comply with this also. Then we signed a contract to them in English, and they to us in the Malayo language and character, with the Sultan of Caytongee's great seal to it. I desired our linguist to translate it verbatim; and it is as followeth, without any amendment of their method or manner of expression.

“A contract made between the Kings of Caytongee and Negarree, and the Prince Purba of Negarree; with the sons of Englishmen, come hither this year to fill both their ships, and go away; not to make any soldiers, or build houses or forts. The price of the pepper to be four dollars and half per pecull, and a great deal of it, amounting to four or five thousand peculls, and to stay here three months for it; and farther to pay one sooco custom per pecull to the King. The pepper to be weighed at the town of Tatas, and to pay for it when weighed.”

We signified to them our great desire of paying our respects to the Sultan of Caytongee, the capital city, about forty miles further up the narrow river. This was readily granted: they at the same time told us, that our countrymen did not use to trust themselves so far up into the country; and that they were not a little pleased to see

see that we put so much confidence in them ; assuring us that we should be very civilly received there ; and protected, if need were, from the insults of the common people.

Having thus, as we thought, overcome all the difficulties, and fully established our trade, we took a formal leave after dinner, and returned on board, where we arrived about eleven at night, the passage being very pleasant. We always carried a chest of small arms, with powder, granadoes and match in our boats ; not so much for fear of the Banjareens, as of the Byajos, who trade there. On the 21st of July we took a house, and agreed to pay forty-five dollars for the use thereof whilst we should stay there, having divided it into proper apartments. I resided there with the other supercargoes

The 22d we set out in our two pinnaces about eleven at night on our journey to Caytongee ; and having rowed all night, we arrived there about nine in the morning. We had a guide boat to show us the way, and a guard boat, with some great men of the country, to accompany us. They chuse the night to travel in for its coolness : but they had much the advantage of us, for both the rowers and passengers are sheltered over head with a covering made of cajan leaves, from the prodigious dews that fall in the night ; whereas the cold dew fell in such abundance on our poor sailors, who were exceeding hot with rowing, that their shirts were as wet as if dipped in the river ; which proved of fatal consequence to one of them, who died soon after. We passed that night very unpleasantly, having little room, no sleep, and our cloaths very wet ; neither had we the satisfaction of making any remarks on the country or river, it being dark. We only heard the noise of strange beasts in the woods on each side. But the most intolerable plague was a vast number of muschetos, or flies, which stung and so disfigured us, that in the morning the eyes of some were swelled up, others mouths drawn awry ; and, in short, our faces so full of tumours, that when day-light came, we scarce knew one another, but only by the voice or habit. Though the sun rises always at or about six, yet we could not see the tops of the trees till almost nine, because of the great fogs : for the greatest part of the country, from the river's mouth for near a hundred miles one way, and above two hundred the other, is nothing but an entire marsh or swamp, and that full of an infinite number of trees of an incredible size. This space at low water is but mud ; and at high water it is all overflown, as I have already mentioned. This vast body of water draining itself down the channels cause the rivers to be so deep, and the currents, or ebbs, so very rapid. I was resolved to return by day-light, that I might have the advantage of seeing the country. The houses are built upon floats, except the King's, Princes, and some few grandees. It is almost four miles long, and our men were more tired in rowing to the upper end of it than in all the rest of our journey : for the current is so very strong there, and we obliged to keep the middle by reason of the houses on each side, that sometimes in half an hour we did not go the length of a furlong. After above two hours hard labour we passed the Sultan's palace, to whom I ordered my trumpets to sound a levit ; from hence we had orders to pass on to the house of Cay Demon our guide, where we were very civilly treated. It was no small refreshment to us to have room to stretch out our legs that had been almost forty-eight hours cramped up in the boat.

This city has much the advantage over Tatas, because it is much more agreeably situated ; and at this time of year, (which is called the fair season, because the easterly monsoon or wind blows) there are good dry banks on each side of the river, firm land, and pleasant fields full of deer, goats, and other animals ; when, on the contrary, in the rainy season, or westerly winds, all is overflown, and the wild beasts



and cattle forced into the mountains ; as I shall have occasion to mention more particularly hereafter.

About two in the afternoon the Sultan sent for us ; the messengers enquired what presents we had brought, of which we informed them. There is no approaching empty handed ; and therefore care ought to be taken to begin so as the stock may hold out. Our ignorance of this custom was of ill consequence to us. They brought handsome baskets, with covers of wrought silk, into which we put the presents. We went in our boats along with the messengers, who carried the presents. We put ourselves in as good habits, and as much order as we could, knowing what effect a good outward appearance has on those people. We marched up, with our trumpets sounding before us, to his council-house, which is built on stilts or posts, about seven or eight feet from the ground, to secure it against the overflowing season : but then the land was firm and dry, covered with very high grass, which was ordered to be mowed down for the greater conveniency of our walking thither. This house is open on all sides, and covered on the top, being about fifty yards in length, and thirty in breadth. At the west end was placed several of their musicians, who played on all sorts of that country musick. In the middle stood the Sultan's throne, being a rich gilt wooden chair, and over it a large silk canopy wrought with gold and silver. This house stands without the bounds of the Sultan's palace. The reason why it is so open is, because all affairs of a public nature, wherein the people in general are concerned, are transacted there ; and persons of all conditions and capacities are allowed the liberty of coming upon the stage, keeping their respective distance. Six or eight guns of about one thousand weight a piece were placed round the house, but without any shelter or battlements, or scarce carriages. By the time we got to it there were above five hundred people in it, who were ordered to stand clear to make room for our entrance : the Prince of Negarree met us, and complimented us very civilly to sit down cross-legged on a carpet that was laid over against the throne, within ten or twelve feet of it. Many thousands of people were round about us both on the stage, and in the fields about the house, to see and hear what was concluded. We did not sit long before we perceived the Sultan coming out of his palace, who is a man of a very good presence, and honest mien, but as swarthy as the rest, dressed in a close-bodied waistcoat, having breeches not unlike rope-dancers, and scarlet stockings, with slippers, a loose China atlice gown, wrought with gold and silver, with a rich dagger set with diamonds in his girdle. Before him were carried in men's arms two young beautiful children, dressed very prettily, the one in scarlet, the other in yellow rich silks, with turbans. They were guarded by twelve men, armed with blunderbusses and muskets, and as many more, with their own country weapons, viz. sampits or hollow trunks, with bayonets fixed to the end of them, and short daggers or creices stuck in their girdles ; the latter are worn by men and boys, rich and poor : with the sampits they shoot poisoned arrows, and they are very dangerous weapons. Upon the King's mounting the stage, or council-house, all his subjects lifted up their hands in a praying posture, and bowed down their faces to the ground, as they sat cross-legged. We immediately stood up and bowed according to the European custom, which is looked upon there as a great affront ; for none must stand in his presence, or near him : but when they approach him to deliver any thing, they go creeping almost double ; and when they withdraw, they creep back in the same manner. We soon perceived our mistake, excused ourselves, and he as readily forgave us, being naturally a man of admirable temper, good, just and merciful.



According to custom he sat silent a few minutes, looking us full in the face ; then thanked us for our present without seeing it, though I believe he was privately informed what it consisted of. He bid us welcome, and said he hoped we met with nothing but civility from his subjects. We thanked His Majesty, and assured him we had no reason to complain ; and that on our own parts we would study how to keep up a good correspondence with them. He also enquired whether we were Company ships, or separate traders ; and being answered the latter, he began to lay heavy complaints on our countrymen, telling us how that at their first arrival they came like us, and contracted with them in the same manner, obliging themselves to build no forts, nor make soldiers ; but that under pretext of building a warehouse, they mounted guns, and insulted him and his subjects in a most base manner ; that he bore it patiently for a great while, till several of his subjects were beaten, wounded, and some killed by them, as they passed by in their boats on their lawful occasions ; that they forced from them such duties and customs as belonged only to him, and acted very contrary to reason, or honesty, in all their proceedings. All this, says he, I bore with great patience. Then he told us with very great concern how they fired several of their great shot at the Queen-Mother, which frightened her so, that ever since she continued almost distracted ; and that they would have taken her prisoner, for what reason he could not imagine : This, says he, I had not patience to bear. He likewise told us of one Captain Cockburn, and some others, (whose names I have forgot) who were taken prisoners, and there put to death, and the manner of their suffering. But, continues he, this is not at present our affair. After an hour's discourse, having told us he would fend for us again shortly, he dismissed us, and we went to the house of Cay Arrea, (who has one here as well as at Tatas) where we bought a parcel of pepper, and hired boats to carry it down.

We continued there weighing of pepper during the four days following, when in the afternoon the Sultan sent for us again. He then received us not in the council-house, but in his own palace, in a large room, where there was a multitude of people. He sat in his chair of state, the rest of his subjects sitting cross-legged on mats, and we on a large carpet. He bid us welcome in a very friendly manner, and said he had provided us a dinner, which was accordingly brought in, and served up in bowls, some of gold, some of silver, and others of brass, laid on the carpet, without cloth or napkins. We had above fifty several dishes of broiled and boiled fowl, curree, or strong broth, rice dyed with turmeric, hard eggs, buffalo flesh and venison ; which last was very good, and dressed in a very relishing manner. He had no better liquor to give us than water ; however that defect we supplied with our own punch and wine. The King, who is a great bigot to his religion, would taste of none ; neither did any of his subjects dare to do it in his presence, though they often used to drink plentifully with us, when in private. During dinner-time we had the King's music, and sometimes our trumpets, which he was mightily pleased with. Dinner being over, the betle-tables were brought, and we fell to discourse of many affairs, till at last he brought about the story of his subjects in rebellion. He pressed us to spare him more arms and ammunition, to which we pleaded inability ; alledging, that we had a long voyage of many months failing to our own country ; that several pirates were abroad ; and that if we should spare him any more arms or powder, we should not be in a condition to defend ourselves. Then he desired us to lend him thirty of our men to assist him against the rebels ; but we excused ourselves, telling him, that it was not in our power to oblige them to go : at which he seemed surprized, asking us, if we were not their commanders.

Then

Then he told us, that he would favour us with a sight of some of his diversions, which indeed we found to be very comical. At a distance from us, behind a sort of a scene, sat an old woman with a white wand in her hand. The King caused the music to play, and taking himself a large ill shaped, ill-tuned fiddle, nodded to the old woman, who on a sudden struck a blow with her wand on the floor: upon which signal immediately entered four very beautiful girls of about seventeen years of age, three much of a height, but one taller than the rest; all dressed in rich silks after a pretty antic manner, with coronets of pure gold on their heads, their hair hanging down in a careless, though pretty order; their necks, breasts, arms, legs, and feet were bare, but painted with a light yellow, which they count beautiful. They also wore weighty gold rings, as big as a man's thumb, about their wrists, and round the small of their legs. The tallest was the richest dressed, and seemed to represent a queen. They entered the room following close behind one another; and as soon as they came on the carpet before the King, they fell on their faces to the ground; then rose on their knees, and lifting up their hands, bowed low three times; this being the respect due to him. After which they fell into an odd fashioned sort of dance, which consisted chiefly in screwing their bodies into several antic and lascivious postures, scarce stirring their feet from the ground. The old woman (who I supposed to be their teacher) would often strike the floor with her wand, whereupon they would all immediately squat down almost on their breech, and rise in so slow and whimsical a manner, as cannot be well described. This lasted above half an hour to our great satisfaction. Then they made their obedience as before, and withdrew.

He asked us how we liked it. We answered very well, and signified that we should be very glad to see something more of this nature, which he readily condescended to: but we were told by his priest, who sat by him, that we must wait half an hour; for that now was an unlucky, or improper time, and therefore God would be displeased at it: that the Sultan was a good man, loved God, his women, and all honest men; so they all muttered something to themselves; I suppose some prayers, or rather some superstitious incantations. After which we had a second part of the aforementioned diversion, and then took our leaves. He advised us very civilly not to ramble far by ourselves, neither in the evening, or late at night: for, says he, there may as yet be some persons willing to revenge the injuries they sustained by your countrymen in the loss of a father or brother, &c. We returned him our most humble thanks for his kind and generous admonition, and departed to our lodgings at Cay Demon's house, who is a man of as much integrity as any in that country; but is very old, and could not be so serviceable to us as he wished.

We employed our time in buying up pepper, as aforesaid, till the 28th of July, then we took our leave of the King; and upon his earnest and reiterated request, did at last promise to spare him our two gunners to go about three hundred miles up the country, to shew them how to use their cannon against the rebels. We set out for Tatas again, having been six days absent from our ships and house.

Our passage down in the day was as pleasant, as our fatigue was great in coming up in the night: for we had a very strong current, by means of which we made forty miles in less than five hours. The water in some places, and at certain times, is as rapid as under London Bridge at half flood: the river is about thirty yards broad at the widest, and is mighty pleasant, because of the thick woods, and lofty trees on each side always green; full of strange birds and monkeys, a great many of which we shot. There is a small town that lay on our starboard side, or right hand, in our return, about three miles from Caytongee; and another something larger on our lar-

board side, about eighteen miles from the said city. These we did not see as we went up, because it was dark. The latter has an ill-shaped wooden castle, with about eleven guns pointing down the river; but so ill mounted, and the castle, or rather shed, so ill contrived that it is of no defence: I believe an open boat, with twenty armed men, might drive the inhabitants out of both town and castle. We passed through another large town that almost joins to the upper part of Tatas, and is called Quaen; and about nine at night we arrived at Cay Arrea's house in Tatas. He obliged us to stay with him that night, though we had rather he would have excused us, being very much fatigued: but he being the chief trader in the country, we durst not disoblige him. He told us, that his daughter was to be married on the morrow, and that we must stay and see the wedding; which was indeed exceeding pleasant, far surpassing any ceremony of that nature I ever saw: I believe he made it the much more magnificent upon the account of us strangers being there. I shall endeavour to give the best account of it I can.

The partitions of one of the largest houses in the town were pulled down, so that it was one entire room, to which another great apartment was added, to make sufficient room for the guests, being some hundreds in number of the best people in the town: the ceiling was hung with white linen reaching on each side to the floor, which was covered with curious cane mats. Round the room they hung the finest of their apparel; and I believe what they had not of their own they borrowed of their neighbours. At the upper end of the room was built a handsome throne, or soufraw, having a canopy, or teaster over it, not unlike our fine beds. There were many cushions and pillows piled up, but no persons thereon. All the night before the wedding day their music kept jangling (for so I may properly say), consisting of several brass-pans, called gongs, from the tenor to the base, which they beat most unmercifully upon, whilst another tosses up and catches again a jingling chain; others beat on small crooked irons, and some keep clinking of brass-plates together: which jargon I can compare to nothing more like than the rough music that the butchers make with their marrow-bones and cleavers, the noise of a copper-smith's shop, or even the thumping and jingling of chains by the mad-folks in Bedlam. We laid down (where we were appointed) not far from the music, in order to take a little rest; but you may guess how little we slept, our heads being\* dinned with the noise of such a horrid concert. In the morning there was a great number of small flags and streamers hung round the door. All their large vessels displayed their colours, firing very often with their guns: and I, to honour this wedding, ordered our men to draw up and continue firing all the day in volleys, with which the father was very well pleased, and returned me many thanks. There were also many of the Baujareens placed round about the house, who ceased not firing and shouting all day long.

About three in the afternoon was ready a great feast, according to custom, and vast numbers of people were placed together, according to their sundry stations or quality. After they had eat plentifully, each man, rich and poor, had a small basket given him to put up and carry away the fragments in. I and my companions dined by ourselves, and what we eat not was given to the sailors. Beetle, ceerce, and opium went about plentifully, and had the same effect among them as strong liquors among us. Immediately after dinner we saw driving down with the current, from the upper end of the town, the seeming hulk of a large ship, of about two hundred tuns, very neatly built with canes on a stage, and covered with cloth painted, so as to represent the sides of a real ship: in the middle of the quarter-deck was seated on a throne the bridegroom, with a coronet of gold on his head, and a green bough in his hand; his body dyed yellow, having a linen

cloth about his waist, his breasts gilt, and his eye-brows shaved close. Before him on the deck stood a figure representing an ostrich, or a pelican, I have forgot which, of a large size, and gilt with gold; on the back of which was a charger filled with rice dyed with turmeric. This ship was full of people, and on the prow or forepart stood a man in a very antic dress, with a broad sword in his right hand, and a shield on his left arm, in a challenging or defying posture; while round the vessel were numbers of boats, and small vessels called guntins, that fired continually on pretence of attacking the large ship wherein the bridegroom was. At length she was drove down to the house close to a stage that floated before the door, and a ladder was put down, by which at first came out of this ship twelve young women, with gold, silver, and brass bowls, containing presents for the bride, who sat on a throne in the house, at the upper end of the room: she likewise sent presents to the bridegroom, who stopped at the door, and was met by the priest; who, after saying a few words, scattered some dyed rice over him as a token or an omen of plenty, which caused a great shout among the people, and an extraordinary firing of guns. Then he was conducted to the bride, and sat down on her right hand. After a little while all the people withdrew, and only they two were left together. This was his second wife, the first living with him also, for polygamy is no sin among them; and a man has the liberty of marrying as many wives as he can purchase and maintain. They all buy their wives, and on the least disgust or offence they turn them home to their parents again. A man indeed in any considerable station must, for his grandeur, keep up the number of his wives: so that if one is turned away, or dies, he must purchase another; and generally a young one, when perchance he is old enough to be her grandfather.

On the 6th of August we received a compliment of welcome from the Sultan of Negarree, with a small present of the fruit of that country; for which we were obliged to make a return, they always expecting something of greater consequence in lieu of what they give, which is no more than a genteel way of begging. We were now settled in our floating house, where we had a vast number of visitants, which at first was troublesome to us, as well as a hindrance of our business. But we were forced to bear it patiently, because it is a custom among the Banjareens to keep their houses free and open to one another. We were chiefly plagued with this inconveniency when we were at dinner; for then our first room was crowded with a great number of them, who in a rude manner would have always something to say to us. We had no other place to eat in, and to meet and agree with them, or to weigh our pepper. But we were not long troubled at this rate, before we had a hog's head roasted, without any design to affront them; which, when brought upon the table frightened them all away, and we were left to ourselves; it being against the principles of their religion to eat, touch, or even be where any swine's flesh is.

The Banjareens are the greatest lovers of opium imaginable; it works the same effect on them as wine and other strong liquors do on us. When it is taken moderately it exhilarates and revives the spirits, and dissipates all drowsiness or sleep; but when taken to excess it causes heaviness, sleep, stupidity, and illness. Their method of taking it is by boiling a quantity of opium in water to a thick consistency; then steeping their tobacco in it, they roll it into small pellets as big as grains of pease; and having thus prepared it, when they design to be merry, a large dish is brought with a lighted lamp in it round which the company sits cross-legged in a circle; the master of the feast begins, and taking a large pipe, puts into it one of these pellets and smokes it, blowing the smoke out both at his mouth and nostrils, which seldom holds longer than three or four whiffs at most; then he gives the pipe (for they use but one, let them be never

so many in company) to the next person on his right hand, who does the same; and so they continue smoking several rounds till they are very much intoxicated. They are sensible that it shortens life, yet the pleasure is so great they cannot abstain from it. Besides, their women, who are very wanton and salacious in that hot climate, exhort them to it, with views to their own satisfaction and pleasure, it being a great incentive to venery. I was once prevailed upon to smoke one of these lumps, and indeed I found it had the same effect as if I had drank a bottle of the strongest wine, only with this difference, that I found a more than ordinary liveliness, delight, and such a merry disposition, that I think human nature cannot long bear the practice of it. However they do not take opium to that excess as the Javans do: for the latter will sometimes take such a quantity as makes them distracted, running in a desperate manner through the streets, with their creice or dagger drawn, and killing all they meet. This they call runing ammook. When a person is fallen into such a fit of madness, it is lawful for any man to dispatch him by what means he can, but they are generally shot, or run through with spears by the soldiers. I was told a remarkable story of this kind by a person that was eye-witness to the fact: a certain Javan who ran ammook in Batavia, and had killed several men, women, and children (the place being very populous), but was at last met by a soldier, who ran him through the body with a pike; notwithstanding which the wretch pressed and thrust himself forwards on the pike (which was half through him) towards his adversary, till he got near enough to stab him with his dagger, so they both died on the spot. They reckon that opium makes them valiant, as well as lascivious.

I have given some hints already in general of the commodities of this country. Those of this port are more particularly pepper, of which they can generally supply you with two or three thousand tuns every year; also long pepper, dragons-blood, the best in the world, bezoar of most sorts, and particularly the fine monkey bezoar, gold, jambe canes, rattans, the best camphire unrefined, and sundry drugs brought thither by the Chinese. Here are also rough diamonds, from three carats downwards: I saw none to be sold of greater weight. I shall hereafter give the best instructions I can towards managing a trade with them; and also the price current of some goods I bought there. I must own they were dear bought; but we being the first ships of our country that went thither since the destruction of the factory, were obliged in some measure to comply with many inconveniences: but if ships were sent thither constantly in the same manner as we were, there would be greater variety of goods to be sold, which with good management might be procured much cheaper.

They have no particular handicrafts among them, except carpenters and goldsmiths; but every one in general has a genius to carving, and with their small ill formed knives they carve the heads of their creices in a very pretty manner. These heads are generally of ivory, but sometimes of wood.

They have a sort of boats which they call flying praws, from their swiftness in sailing. They are made of the trunk of a tree hollowed, and sharpened at both ends, not much unlike the stern of our wherries. They have no keel nor rudder, but are steered in a different manner from ours, over the quarter, with very long but small paddles, whereof one, that is thirty feet long is not above twelve or fourteen inches over. Their seats are across, raised above the gunnel or side of the boat, where they sit with their legs in the bottom; and to prevent their oversetting, they fix two long poles or out-layers, one across the fore-part, and another across the after-part of the boat, each end being run into a large bamboo. Being thus fixed, and fitted with a large mat sail, they will run sometimes at the rate of twenty-four miles an hour; and when it blows hard,

hard, the people run out and in on the outlayers, according as the gale is fresher or abates, to keep the boat upright.

The Chinese that live among them are the only persons that have shops tolerably well furnished: they set them off with coarse chintz, calicoes, baitees, tea, drugs, China-ware, and many other things.

Their current money is dollars, half and quarter-dollars; and for small change they have a sort of leaden cash, being small rings strung on a kind of dry leaf.

The pepper is not cured till about the middle of September; however we continued buying several quantities that were of the last year's product; but when it was cured, they brought some every day to the door of our house in their praws, but in very small parcels; sometimes under a pecul, and sometimes four or five, which we weighed by a large dotchin or stilliard that belonged to the town, the truth of which we had tried by our own weights. We paid them for it on the delivery, and sometimes went to their houses in our long-boat, and weighed off thirty or forty peculs at a time, for which we paid them presently, and brought it to our house. We were now put to great streights for room to stow it in, till we had an opportunity to send it on board, which we were prevented by rain, wind, and many other accidents, for two or three days. We had loaded our house so deep that we feared its sinking; so we thought proper to buy a vessel, that might serve us in lieu of a storehouse. We accordingly bought one of Cay Arrea for fifty pieces of eight, which held about two hundred peculs. This also served to carry it down to our ship. We continued buying and weighing of pepper till the 19th of August, and several of the great men of the country came to see us, sometimes on board, but oftener at our house, to whom our interest obliged us to shew great civility. We were daily entreated to lend money to several of these Oran-Cays, with mighty promises of being faithfully repaid in pepper; most of which proposals we put off, but were obliged to comply with some, and always took care to have such security as not to make bad debts.

On the 20th we had another invitation to go to Caytongee, from the Sultan of Negarree, who came thither above two hundred miles to see us. Accordingly I went, together with Mr. Swartz and Mr. Becher, leaving a proper person behind to buy what pepper should offer in our absence. We arrived there the 21st, and had admittance to him, having made him a present. He thanked us for the small arms we had spared his brother the Sultan of Caytongee, but heartily pressed for more; but we excused ourselves. Our reception was much the same as we had from the Sultan of Caytongee, therefore I will not trouble the reader with the particulars. I shall only add, that he is a man of a middle stature, well proportioned, and of a good countenance. The next day we made a visit to the Prince of Negarree, at his house at Martapoor, or Matapoor, a town so called, about ten miles wide of the city of Caytongee on the banks of a small river, that falls into the former, and is so narrow that in some places we had not room enough for our oars. This part of the country is never overflowed, and is exceeding pleasant. The Prince's palace is as good as that of the Sultan at Caytongee; there are a few guns placed round it, and he has a small armoury, consisting of firelocks, match-locks, blunderbusses, pistols, brags rantackers or swivel guns. Those people look upon him as the greatest of generals, and he is as renowned among them for his courage, conduct, and success as the great Duke of Marlborough is all over our part of the world. Both the Sultans of Caytongee and Negarree (who are brothers) have their chief dependence on his conduct and management of their wars, imagining him to be invincible. He entertained us very civilly, and treated us with an excellent dinner of venison, &c. He was pleased to give us an account of the state of the



the rebels, and of the cause, which I hinted at before, of their rising ; how that he had headed the Sultan's forces twice against them, and having routed them each time, had brought down several of their chief prisoners to His Majesty, who thinking to win their affections by clemency, pardoned them, and having loaded them with several presents and marks of his tender indulgence, he sent them back, exhorting them to continue stedfast in their duty and loyalty towards him for the future. However, that this had no effect upon their stubborn ungrateful minds, but that they rebelled a second time. That he was now desired again by the Sultan to march against them ; " but (adds he) if I do, I shall take care not to bring them hither to be punished."

The day proved very rainy, which prevented the design he had of giving us the diversion of stag-hunting, for which purpose he had ordered horses to be got ready for us. He told us their method of hunting, viz. several men well mounted, with spears about six feet long in their hands, take out one or two of their mongrel dogs, who soon rouse the game, which is in a very little time run down (the deer in that country being very fat, and consequently easy to be overtaken) by the dogs and horses, and then they flick them with their spears. We diverted ourselves in the afternoon with shooting at a mark with his cannon, over which he had caused a shed to be built while we were at dinner, to shelter us from the rain, which was very violent. I have great reason to believe that they get a great part of their gold at the head of this river, which cannot be much farther up the country, by reason of the prodigious high hills that are not far from hence. One Cay Deponatee informed me, that this river springs from the top of one of the highest of these mountains, from which it falls in a most wonderful cataract. Having taken our leave of the Prince, we returned that night to Caytongee, and lay at Cay Demon's house, which we preferred to Cay Arrea's, by reason we had there much better lodgings and entertainment. The next day we returned to our factory. At this time the rainy season was begun, but the land was not yet overflown about the city of Caytongee.

Whilst we continued here buying our cargo, the gunner of the Borneo, and mine, went up with the Indians on the 3d of September, according to the promise we made to the Sultan, to assist against the rebels. These wars retarded very much our loading, and the rains being now come, we were very much afraid that the enemy could not be subdued this year ; if so, it was impossible for us to load both our ships : but on the 14th we were somewhat encouraged by the coming of the Prince of Negaree with six praws of war, and a great number of men, it being in his way ; for he must have come down this smaller stream to go up the main river against the rebels. He caused his ships to anchor before our house, and did us the honour to come to see us. He made us the compliment of telling us, that it was chiefly for our sakes that he was prevailed upon to go against them any more, and that if he had success he would immediately dispatch our loading. However the rains continued so violently, that we were very dubious of the possibility of his attacking them, or of the pepper's being cured that season. This made us consider, whether it was proper to keep both our ships there in expectation, or to dispatch one to Bencouli in the island of Sumatra, before the westerly monsoons were set in ; for if not, she must have lain six months longer on demurrage in this port : and should we not find pepper enough for us both, it would have been a great and needless trouble to us, and expence to our masters. After having considered thereon, we resolved to send away our consort the Borneo. Our gunners were now returned from Negaree, and gave us an account that the rebels had been forced to retire, by reason of the rains that had already overflown a great part of the country about that place ; that they had attacked the castle, but were repulsed.

We



We sent messengers on the 29th of September, to acquaint the Sultan of Caytongee, that the expiration of our time was near at hand (there being but fifteen days to come), and that we had not yet the fourth part of our loading; and moreover that the Chinese and several of his subjects had hoarded up their pepper, in hopes to sell it for a greater price to the Chinese junks, when they should come, which was not according to our contract: that in case we were not soon supplied, we should have the westerly monsoons to encounter with: that likewise his subjects refused to take two-thirds of our money, though it be such as all other nations accept of: and in fine, we desired that he would be pleased to think of some expedient to load us both, otherwise we should be obliged to send one away to some other port. On the 3d of October the messengers returned, and told us, that His Majesty expressed great concern for our disappointment, and was against our sending away one of our ships, assuring us that he would oblige his subjects to bring in all their pepper at the contracted price, and hoped to find an expedient for our light money. Accordingly he sent some persons the next day down to search both Tatas and Quaen, with orders to seize all such pepper as the people should refuse to sell us at the price first agreed on. However we found no probability of loading both; therefore we dispatched away the Borneo with the overplus of our money (being eleven thousand pieces of eight), also two hundred and twenty-four bags of saltpetre, reserving to ourselves as much as would be sufficient, as near as we could guess, to purchase the remainder of my loading.

On the 21st of October I, with two other supercargoes, went in my long-boat over the bar with the said ship, and took our leave of the captain about nine at night, in order to return to mine. We rowed and sailed most part of the night for the river's mouth; but it being very dark we lost our way, and had like to have gone up the river Byajo, amongst the wild Indians; but perceiving our mistake we came to anchor, and waited till day, keeping a strict watch for fear of being surpris'd by any of the Byajo men. The evening following we arrived on board, much tired, and from thence we proceeded towards Tatas, where we arrived the 23d, towards night.

We were not long there ere we were sensible how exactly the King's orders were put in execution for seizing the pepper, and forcing the owners to bring and sell it to us. There was also a larger quantity brought into town than we could have imagined, by reason of many dry days that happened, which is very uncommon in this season, so that now we began to repent that we had sent away the other ship; therefore, hearing that she was still not far off on the coast, we dispatched our long-boat with orders for her return, but could not find her. This pepper soon filled my ship, and the overplus of the money I employed in buying gold. The price and manner of purchasing it I shall hereafter mention.

My ship being loaded, I sailed out of the port of Banjar Massien on the 1st of November 1714, and anchored on the other side of the bar, in four fathoms and half water, about four leagues from the shore, having good anchor ground there. We had now our water to fill and provisions to bring on board, because I was willing to go over the bar as light as I could to prevent our grounding, which we performed very happily, though it was in the night, and we drew thirteen feet eight inches water: and whatever may, or has been said of that bar, if care be taken to find out the deepest water of it, any ship, though she draws fifteen feet water, may go over with great safety.

The next day about three in the afternoon (having taken care to see the ship well moored) I set out in my pinnace towards the factory, the wind blowing very hard: at night we reached the river's mouth, and so rowed all night, till about four in the morning

morning we got to Tatas. During our stay here, from the beginning, we had great plenty of fish, fowl, fruit, potatoes, yams, cucumbers, deer, goats' flesh, &c. brought to our door every morning early in small boats by women, of whom we bought what we wanted, and that at a very reasonable rate. This was, they owned, the greatest opportunity they ever knew of getting so much money in so short a time; for when the English factory was there before, there was always such enmity and inveterate hatred between them, that the natives declared they never carried to them the tenth part of what they did us, being willing to have as little to do with them as possible. They owned to us that they poisoned one Captain Barry, who was chief of the settlement, and that they did it so cunningly that the rest of the English had no suspicion of them. It is most certain that they had a great hatred against all that belonged to that factory, and even the whole English nation for their sake, which made us meet with more difficulties than ordinary. It was an imprudent thing of those gentlemen to have given them occasion of having so barbarous a notion of the principles and behaviour of all their countrymen. It is true, we took all the pains imaginable by an honest, civil, complaisant way of behaviour and dealing, to remove this great prejudice out of their minds; though I must own we found it a pretty hard task, they being so prepossessed with an opinion of our baseness and barbarity. I believe, indeed, that the great confidence we put in them, by conversing civilly and familiarly with them, eating, drinking, and smoking frequently with them, and trusting ourselves so far up in the country among them, did not contribute a little to make them have a greater value for us than for other strangers. They are certainly the most peaceable people in the world to one another, quarrelling seldom or never among themselves, and avoiding above all things any occasion of giving an affront, because when once it is given, it is never to be forgot; for they exceed even the Italians in revenge. They were strangely surprised to see two of our sailors fight with one another at handy-cuffs; and when the battle was over, and perhaps both very bloody, to see them sit down in a friendly manner over a bowl of punch, shaking each other by the hand, as merry and as intimate as if they had never quarrelled. To satisfy them on that point, we told them, that if our quarrels were never so great we never bore each other malice. I cannot omit mentioning an instance of their timidity and fear of seeing their own or any other person's blood: one day I being indisposed, ordered the chirurgeon to bleed me, Cay Deponattee and several others of the natives being in the room, and being strangers to such an operation, were in a great amaze to know what we were about to do; till at last the vein being opened, they saw the blood gush out, whereupon they ran immediately out of the room in a great fright, crying out, "*Oran gela attce*," that is, the man's heart or mind is foolish; telling us, that we let out our very souls and lives willingly, which they said was very ill done; to which I answered, that their diet being mean, and their drink only water, they had no occasion for bleeding; but that we who drank so much wine and punch, and fed upon so much flesh, which rendered the blood hot and rich, had an absolute necessity of doing it, otherwise we should be sick. "Aye, (says Cay Deonattee,) I think that shews you to be still greater fools, in putting yourselves to such great charges on purpose to receive pain for it."

To convince him that bleeding on some occasions was absolutely necessary, I put him in mind of the wonderful effect he had formerly seen it produce; for he, with others, being entertained by us on board, to honour them we fired several great guns. There was on quarter-deck a young monkey lately caught, which was so frightened at the noise, and overcome by the smell of the powder, that he fell down dead to all appearance. Mr. Henly, chirurgeon of the Borneo, being present, offered me to bring him

him to life again. I told him he would do very well to shew such an experiment before these ignorant persons; whereupon he bled him in the fore leg, which immediately revived the monkey, and made him skip about as briskly as ever. This seemed no small miracle to them, and gave them a great opinion of our ability: "for (said they) if you can bring a dead beast to life, no doubt but you can bring a dead man also."

They esteem him the best qualified and most ingenious man, that can most overreach and cheat his neighbour by false weights, measures, &c. neither do they reckon it a fault, but glory in it as a master-piece of wit. They often used to call us fools, when we have prevented their cheating themselves by a mistake in weighing goods, &c. Sometimes they would bring to our factory poor ignorant fellows out of the country (having a parcel of pepper to sell) who could neither read, write, or understand the weights: and the person in whom they confided in town to see justice done to them in disposing thereof to the best advantage, used to whisper one of us, that in weighing the pepper we should say eighty pounds when there was one hundred or thereabouts, and so set it down; that, says he, we may divide the overplus between us; which we always refused to do, and rejected his proposal with indignation; telling the simple owners, that whenever they came by themselves, though they understood not the weights, yet they should not fail to have justice done them, and that we scorned to take any more than our due. We took all occasions to make them have the best opinion of us that possibly could be, to the end that if ever we were sent thither again, we might not only be the more able to serve the Honourable Company, but also that we may thereby give them a good opinion of all Christians in general, that may have occasion hereafter to go thither. By our equitable way of dealing we insinuated ourselves very much into the Sultan's favour, who, as I mentioned before, is really a Prince of very honest moral principles; and also into the good esteem of the generality of his trading subjects, who had a great value for us upon the account of our plain honest dealings.

Having now in a manner finished my affairs in this country, I shall give a short account of my last journey to Caytongee to take my leave of the Sultan. I set out from Tatas on the 8th of November, in company with Mr. Swartz and Mr. Becher before mentioned, in a prau rowed up by the Indians; for we were now so intimate with them, that we could as well trust ourselves with them alone as with our own men. We arrived there on the 10th, and took up our quarters at our old friend Cay Demon's house, where we were made heartily welcome. We sat very merry till about eight at night, when, preparing to go to bed, we heard all on a sudden a most terrible outcry, mixed with squealing, hallowing, whooping, firing of guns, ringing and clattering of gongs, or brass pans, that we were greatly startled, imagining nothing less but that the city was surprised by the rebels. I ran immediately to the door, where I found my old fat landlord roaring and whooping like a man raving mad. This increased my astonishment, and the noise was so great that I could neither be heard, nor get an answer to know what the matter was. At last I cried as loud as possibly I could to the old man to know the reason of this sad confusion and outcry, who in a great fright pointed up to the heavens, and said, "*Leat joo Shutan dea Macon Boolon*;" which signifies, "Look there, see the devil is eating up the moon." I was very glad to hear that there was no other cause of their fright but their own ignorance. It was only a great eclipse of the moon. I smiled, and told him that there was no danger; that in a little while the moon would be as well as ever. Whereupon catching fast hold of my sleeve, as I was returning to bed, he asked me if I was sure of it, for they take us white men to be very wise in those matters. I assured him I was, and that we always knew

many years before when such a thing would happen ; that it proceeded from a natural cause, according to the course and motion of the sun and moon, and that the devil had no hand in it. After the eclipse was over, the old man being not a little rejoiced, took me in, and after much discourse upon the nature of such a thing, I promised to give him an account to an hour when such another should happen ; which I did accordingly some few days after. He seemed to be doubtful of the truth, but told me, that if what I said should happen true, though not to an hour, but within twenty-four hours of the time I had calculated it to, he would then believe his priests no longer touching that subject.

Finding that we were like to stay here some days before we could have admittance to the Sultan, we proposed in the interim to go to see the Prince at Martapoora : as we went, we met him hunting by the river-side. He told us, that he should come to Caytongee before our departure thence, wherefore we returned back. That night we had news from the factory, that our gunting was lost in Tomborneo-road, just a-stern of our ship, the men having narrowly escaped with their lives ; also that our house having broken its moorings, drove several miles down the river, and might have gone to sea had it not been for the kind assistance of our neighbours, who came with their boats and ropes, and towed it up the next flood. The next day we had admittance to the Sultan, who received us now in a private manner, without any strange company or retinue as formerly. He expressed some concern for our departure, and, because the other ship was gone away without her loading from his port, he gave us most pressing invitations to return again ; assuring us that there should be pepper enough prepared to load two or three ships without loss of time, though they should be much bigger than ours. We thanked His Majesty, and at first pretended an indifferency, telling him, that the price was very great, that we came a vast long way, and feared that we should get nothing by it. He answered us, that ere we came again it would be much cheaper. He further desired me to bring him sundry things, which he made me write down, and said that he would pay exactly for them, and that the price should be allowed us out of the customs. He caused three gold plates to be made of the form and size here marked, of which he gave one to me, another to Mr. Swartz, and the third to Mr. Becher ; and told us, that was a token of his friendship, and a chop or grant of trade, having the stamp of his great seal on it ; that on the producing it at our return, he would not only protect us, but grant us the liberty of trade in any part of his dominions ; then he wished us, in a hearty manner, a good voyage, and a speedy return. I have here inserted the words that are on the gold chop, as also the English of them, as near as I can, viz.

De ca Tawon Zeib, daen ca Boolon Dulcaidat,  
Eang Sultan Derre Negree Caytongee, dea  
Casse enee Chop pada anacooda Beeckman.

That is,

In the year Zeib, and the moon Dulcaidat,  
The Sultan of Caytongee gave this chop to Captain Beeckman.

The prince also desired us to bring him several things, and obliged me to write them down. After this, we took our leave, and proceeded on our return to Tatas. The country was then all overflowed, and afforded a dismal prospect : the fields where the cattle used to graze, when we were there last, were now covered with water, and the people obliged to go from house to house in boats. Those mighty inland floods drove us down with great expedition by reason of the rapidity of the currents. We spent the remaining part of our time in buying gold, and in clearing all matters, that we might

might part as fairly and friendly as possible: in the mean time, I thought proper to go down on board to see how forward our affairs were there, and whether there was any room for more pepper. Accordingly, on the 12th of November, about ten in the morning, I set out in the long boat, with six men only and the mate, she being deep laden with provisions, arrack, and canes: about five at night we got to the river's mouth, where we cast anchor, resolving to lie there that night, and not venture to sea in the dark, by reason the mate had forgot to bring a compass in the boat. We had not been there long, when the fairness of the weather made us alter our resolution; so we weighed, in hopes to get that night on board the ship that lay about seven leagues from the river's mouth: but we had not been at sea above two hours, when there arose a very great storm, and so much rain, that we could see neither ship nor shore: our case was very desperate, having an old leaky boat, a long dark night, and no compass. We spent the night driving up and down till daylight; neither were we then in a better condition, for the wind began to blow much more violently, the storm increased, and the weather so hazy, that we could not see the length of ten or twenty yards on either side of us: So that finding the sea swell most boisterously, we found that unless we lightened the boat, we must inevitably perish. Hereupon I caused two thirty gallon casks of arrack, that were in the bows of the boat, to be staved, and the liquor to be heaved overboard in buckets. This made the boat more lively; however we could not get sight of our ship till about ten o'clock. We were mightily overjoyed when we saw her, and made the best of our way, expecting to be on board in a short time: but alas! how easily are human hopes frustrated. On a sudden the wind flew about to the south-west and blew much harder, though we were now so near her that we waved our hats at each other, yet we could get no assistance, neither could we hold the wind any longer; but were forced to go before it, let it drive us where it would: notwithstanding all the art we could use, we lost sight of the ship again in less than half an hour. We could expect nothing then but death; for the seas increased so prodigiously, that we were forced to stave two casks more of arrack, and heave it over, besides seven hundred canes that lay in our way; and as an addition to our misfortune, a small cagg that had some boiled fowls and bread in it, was in the hurry thrown overboard also: so that we had no victuals left, nor drink but arrack, which last was the only thing that kept life in us; for the rains had held us now almost forty-eight hours, which so extremely chilled us, that our teeth chattered in our heads; and we were in a strange sickly condition, by being so long a time sopped in rain and salt water. At last we discovered some trees a-head of our boat, which was rather a terror to us than a comfort; for first we were tossed with such violent seas, that we feared our boat would be dashed in pieces against the shore, which it was not in our power to keep clear from. We knew of no harbour, or what sort of people we might fall in with, or whether there were any inhabitants or no; and then we had neither fire nor provisions; and our pieces were so wet that they could not be serviceable to us, either in killing wild fowl or beasts for our sustenance, or in defending ourselves against any barbarians among whom we might be cast, besides the danger of being drowned; so that we were in a most deplorable condition. However, when no hopes seemed to be left, and nothing appeared but (as the poet says) *Plurima mortis imago*, "a manifold image of death," it pleased God to drive our boat against the mouth of a small creek; there was a bar, or bank of sand, before it, against which our boat being tossed by a strong sea, she stuck at the first blow, it being ebb, but the seas continued to break over our heads, and sometimes over the very top of our mast. However, the sea falling off soon by reason of the ebb, we were left dry on the said bank, about a musket's length from the shore, there being a considerable depth of

water between us and land. As faint and benumbed as we were, being starved both with hunger and cold, we plucked up our spirits, and the wind being somewhat abated, we leaped overboard up to our middles in the sea, and as the tide came in so we launched the boat a head, till at length we got her over the sand into deeper water, and so into the narrow creek about twenty feet over, and covered with trees. Now night was coming on again, and the rains still continuing made it most intolerably cold, we having nothing to shift us, or fire to warm ourselves. The boat being moored, we sent two of our men on shore to see if there were any houses or inhabitants: they saw nothing but an old hut, covered up one side with Cajan leaves to keep out the westerly winds; also a little pathway, which they having followed for about half a mile returned back again, being afraid to go farther, lest, being unarmed, they might be attacked by the wild beasts. They having brought us no comfortable news, we began to search the boat, and found some potatoes that had been all the while soaking in arrack and salt-water: however, we eat them raw very greedily. Before it was quite dark, we espied a man making down towards the sea, who, as we afterwards found, had some fishing-gear there: he was mightily startled when we spoke to him. We told him, that the stress of weather had drove us into that place; that if he could help us to some fire, rice, or other provisions, we would pay him honestly; and further to gain his favour, we gave him a knife, a burning-glass, and some other trifles that I had in a little box. This pleased the old man, who offered us his hut to lie in; but we refused, thinking ourselves safer in our boat, though not so well sheltered. He made a fire by rubbing two small pieces of dry wood together (which we afterwards endeavoured to do but could not), and gave us some rice, and a small earthen pot to boil it in. Then he went to the place where his ware was, and in a little time brought us a mullet and a cat-fish: in the mean time, we found a small piece of raw salt-beef, that had been trod under foot in the bottom of the boat, which we boiled with the cat-fish, the broth whereof I thought then was the best that I ever eat. He told us, that there was a town about three miles off; but that he, his brother, and his daughter, lived at this hut, getting their livelihood by what fish they could catch, and sell to the townsmen. The river that runs here into the sea, is called Bowalajoong: when you are in Tomberneo road, bring Tanjong Salatan to bear south-south-east, and Tomberneo south-east quarter south, then Bowalajoong river shall bear east quarter south of you. I take it to be a better place to water at than Tomberneo.

We were now come to life again, and had almost forgot our late melancholy scene. We lay there in our boat three days and three nights longer, ere the wind and rain abated: then we got our boat over the bar, and set to sea. After some time, the weather being then pretty clear, we got sight of our ship again, and arrived happily that day on board, having been six days and six nights in our boat exposed to the stress of weather, and all the dangers of perishing imaginable. We had suffered so much by cold, hunger, and wet, that all our lives were in danger; particularly one Mr. Lawrence Orchard had got such a terrible cold by it, that he died in a few days after, and another escaped very narrowly; for my own part, though I held out the best of any of the company, after the first night's rest in my bed, I was so stiff, and had such a pain all over my bones, that I was hardly able to stir. Our people on board, as well as those at the factory, had given us over for lost.

I set out again for Tatas on the 30th of November, and arrived there next morning; where I found Mr. Becher very dangerously ill of a fever, and light headed. There was one Cay Deponattee, a very honest man, who often used to visit us: he happened

to come one day, when Mr. Becher was delirious, and perceiving him to be very earnest in speaking, he asked us what he talked of? We told him, he was feila, that is, light-headed; and we explained to him what extravagant things he said. Whereupon he told us, that he was possessed with the devil, and that it was not he that spoke, but the devil that was within him. He begged that we would carry some fowls, rice and fruit, and offer it to the devil in the woods, where they have certain places for that purpose, and that then the devil would leave him; for, says he, what signifies the expence? We answered him, that we knew better things, and that his illness did not proceed from what he imagined; that we Christians feared not the devil, for that he had no power to hurt any, but those that put their trust in him, and not in God. The old man laughed at our notions; and said, that their Sultan was of our opinion, but that for his own part he knew otherwise by experience. The next day he came to see him again; and upon his enquiring how he did, Mr. Becher (being then sensible) answered him, that he was something better, but that he had a great pain across his stomach. "Aye," says the old man, "I told you yesterday what the matter was, but you are fools, and would not believe me, nor be ruled by me; for though the devil is gone, he has smote you on the stomach; and without you follow my directions, you will certainly die in a very little time." Then he desired that his wife might go and make such offerings; but Mr. Becher answered, that she might do what she pleased, but not on his account; for that he would rather lose his life, than be beholden to the devil for it.

The manner of these offerings is thus: when any person is very ill, especially in the condition Mr. Becher was, imagining him to be possessed, they buy the aforesaid provisions; and having dressed them with as much care as if they were to make a splendid entertainment, they carry this banquet into the woods to a certain house or shed, built always under the largest trees near the water side, where they leave it. As to what ceremonies of prayer, &c. they use on this occasion, I know not particularly; only that they invite the devil very kindly to it, assuring him that it is very good, and well dressed, and begging him to accept it. Now these woods are so full of monkies, that if never so much was left at night they would devour all before morning, which these ignorant creatures believe to be eaten by the devil; and if the person recovers, they think themselves very much obliged to him for his civility and good nature, and by way of thanks they send him more: but if the person dies, then they rail against him, calling him a cross ill-natured devil; that he is often a deceiver, and that he has been very ungrateful in accepting the present, and then killing their friend: in fine, they are very angry with him. I saw one of these houses on the banks of the narrow river, where we passed almost daily, under a vast tree, which is called the devil's tree. They have besides, several other ways of enchanting away distempers, and fixing them sometimes on other persons, as they think. One particular manner is thus: they make a thing in the form of a boat, but so little, that one may carry it in his hand; into this they put some offerings, and set it on the water, and let it go adrift; but woe be to him, as they imagine, that takes it up. I was once going to take up one of those diabolical store-ships as it floated down the river; but the natives cried out immediately, charging me not to touch it, for that I should instantly die, the devil would be in that rage with me, for intercepting his provisions. I often enquired of them, whether they ever saw the devil; and being answered in the affirmative, I offered to go any where with them to see him; but they refused to go purposely on that account, by reason he would be very angry at it, and they



they did not care to provoke him, he being mischievous enough of himself. I asked them in what shape he did appear to them; they answered, like a flame of fire, and that they only see him in the woods. This convinced me that what they take for the devil is only what we call in the country, Will in the wisp, or Jack-a-lantern, seen chiefly in such swampy wet grounds.

Thus much and more they retain of their Pagan customs. As to what they hold of the Mahometan religion, which is what they pretend to profess, I know that they allow polygamy; they keep Friday as a sabbath, and fast all the Bairam, as other Mahometans do, in the day-time, and make great illuminations and feasting in the night only. Some are so strict that during the Bairam time, they will not swallow so much as their spittle in the day. They say their women have no souls, but die like beasts; and that they are only designed by God to gratify men's appetite; for which reasons the women are never suffered to use any divine worship. Some of the wisest of them have not such aversion for Christianity as other Mahometans, who generally are professed enemies to it: but these speak very respectfully of Jesus Christ, and say that he was a great prophet. They believe that Adam was the first man; that the world was once drowned, which they have great reason to do, seeing yearly such great deluges in their own country; and that there are people in the world, though none amongst them, that they call Oran Moosa (meaning the Jews), who they say follow only the law of Moses, rejecting the doctrine of both Mahomet and Jesus.

I cannot think it would be a difficult matter to establish the Christian religion among them. It is true, the Romish missionaries attempted it formerly; but after making many profelytes they ruined their own design, and lost their lives by their own obstinacy and indiscreet zeal. Cay Deponattee, a man of the greatest character of probity among them, told me, that several years ago there came into those parts a Portuguese padre, or monk, who by his courteous behaviour and endearing ways had gained a great many to the Christian religion, but not content to preach among them, he must needs venture up into the country among the barbarous inland people, called Byajos, by whom he was cruelly murdered. That some few years ago (it being long after the former was dead), there came another who spoke the language as well as if he were a native of that country; that by his presents, particularly of linen, and his shew of having so little value for money, assuring them that his voyage thither was not out of any motive of worldly interest, but to save their souls, he insinuated himself nightly into their favour, and made great progress whilst among the Banjareens; but that after some time he told them that the spirit of his deceased brother had appeared to him, when in his own country, acquainting him how he was slain up in the inland country, and ordering him to come thither; that accordingly he was then come, and must go to the place where his brother was murdered. The Banjareens had great love and respect for him, and used all means to dissuade him; and particularly this Cay Deponattee, who is my author, and was very intimate with him, pressed him extremely not to venture himself, for that he could expect nothing among such barbarous people but to meet with the same fate as the former had. However, all was in vain, for he was resolved to go; and said, that if they put him to death he would glory in his sufferings. Accordingly, he went and made many profelytes, who built him a church, and were ready even to worship him; till at last they began to be discontented and murmur at the great expence he had put them to in adorning their church with gold, &c. and more especially because he had not performed his promise of shewing them all their deceased friends; whom indeed he promised they should see in the other world, but they

they understood it was to be in this world, neither could he beat that notion out of their heads. So that taking him for a false prophet and an impostor, since his words did not prove according as they understood them, they put the poor man to a most cruel death, and demolished the church, which they looked upon as a decoy to cheat them of all their riches. Now had he stayed among the Banjareens I doubt not but he might have succeeded in his designs, and have converted the whole civilized part of the country : by which means and by the influence and power of these people, the gospel might have been more easily propagated among that other barbarous savage nation. Neither was there less imprudence in endeavouring so soon to persuade them to part with their riches, which they are so fond of, to embellish churches ; for that could be done in due time, when they were better instructed in the principles of Christianity. Nor do I see what necessity there was for such mighty ornaments more than the apostles required in the primitive times, among much more civilized and sensible nations. But no good ever comes of blind obstinate zeal.

There is but one mosque, or Mahometan church, in the town of Tatas, and is called by them Mefajit. Every one that enters must wash his feet, and there hangs a piece of linen at the door to wipe them dry. As to their manner of worship I can say nothing, for they will suffer none to enter but such as are of their own religion ; but I have heard them at prayers sometimes all night long. They circumcise their children when they are about eight years of age, at which time the boys begin to cover their nakedness ; but the girls begin sooner, by reason they are at that age generally marriageable.

We hired a large gunting on the 6th of December, to carry on board a parcel of pepper, that we had bought to complete our loading, together with our baggage and the furniture of our house. Many persons came to visit us, and wish us a happy voyage, expressing a general concern for our departure : for we had lived so long and so friendly with them, that we were in a manner naturalized there. Before our departure, our old friend Cay Deponattee desired a private conference with us. He acquainted us, that the Sultan had enquired of him what he thought we were, whether Company's ships or separate traders ; saying, that he was sometimes jealous that we were not what we pretended ; that however, be it how it would, we had behaved ourselves very well, and had done nothing unfair, and therefore he should be glad to see us again. I then asked his opinion, whether he thought the Sultan would suffer the Company to trade, in case they sent thither again. He answered, that he did not know but he might, provided proper persons were sent, but that they had not yet forgot the late ill treatment which they received from the Company's servants. After this we fell into sundry discourses in relation to the Company ; and I took no small pains to give a true idea of the honour, riches, and fair dealings of that honourable body. I found that their notions were very odd of them, believing them to be a body of people at variance with the government in England, in the same manner as the Byajos are against their Sultan. How they came by this notion I know not, unless it were put in their heads by some separate traders that used to load there, during the time of the Company's settlement ; thinking by defaming them to establish the better their own interest. He told me likewise, that the barbarous behaviour of those servants had confirmed them in that opinion, but I persuaded him as much as I could to the contrary.

On the 10th, about noon, we departed out of town with colours flying and trumpets sounding, in the same manner as we came in ; leaving a person behind as security till the vessel returned. That night we anchored in China river, and the next day by noon we got safe on board. On the 14th Mr. Becher, the chief supercargo of my ship, died  
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on board of a violent fever ; and on the 18th our linguist, whom we had left at Tatas, came on board very sick, for the rainy season being now well set in, we all began to be very unhealthy.

We weighed anchor the 21st, about six in the morning, with a small gale of wind at north-west, and the next day about eight in the morning I took my departure from Tanjong Salatan, which signifies the southernmost cape or head-land, it bearing east half north seven leagues distance. I then directed my course to pass through the straits of Bally, according to the orders I had received from my honourable masters. Being now at sea, where very little worthy of remark happens, I shall take the opportunity of making a small digression ; and, for the benefit of those who hereafter may be sent to this port, give the best instructions and remarks I can, whereby a trade may be continued with great advantage in the port of Banjar Massien.

If the ships be there by the beginning of August, it is soon enough to make the contracts, and also to purchase what pepper remains, if there be any of the last year's crop, which may forward your dispatch ; besides, it is better than what you buy afterwards, as being better cured by the length of time, and consequently will not waste so much in weight in bringing over as the other. At your first arrival I think it most advisable to anchor below Poolo Cocket, where you need not wait long ere you have an opportunity of sending an account to the Sultan of your arrival and business, and receive his answer ; for should you immediately send up your pinnace to Tatas, it would greatly surprise them, unless there was some person therein that they knew very well. However, you cannot lie there long before somebody comes on board, who will ask innumerable questions, and be very careful to know your size, number of men and guns. They can presently tell very near what quantity of pepper your ship is able to carry. You ought to be very cautious of shewing any fear or distrust of them, or of arming any centinels, &c. which will give them great cause of suspicion, that you look more like warriors than traders. The former they have the greatest aversion imaginable to, being naturally cowards. They will expect a present as often as they can have the least colour for it ; especially by their frequent superfluous visits, and feigned pieces of services, and stories from their oran-cays. But remember there is no end to their expectations ; and before you have done with them, though you be never so good an economist, you will find them amount to a considerable value. We were led into an error for want of knowing this, and on our first arrival we gave pretty handsomely, thinking that doing it at once was sufficient. But as they go on gradually with their services, so you must with your presents ; for I have been obliged to stay eight days at Caytongee before I could have admittance to the Sultan, when he had been informed by his emissaries that I came empty-handed, though his former presents had been large and considerable. They are so mercenary that the best of oran-cay, or great men, will receive four or five dollars wrapt up in a piece of paper. I am the longer upon this head by reason you will find it a material article ; proper things may be provided cheaper in England than at Batavia. I cannot give instructions touching a price or agreement with them, for that is according to the plenty or scarcity of pepper, and according as there are more or less China junks in the port ; but be sure to make your contract very full and special, for if there be the least room for a further demand they will be upon you. It is proper to insist in the contract upon a house to dwell in among them, and a warehouse. These they will be glad to allow you for their own advantage ; however, if you do not mention it in your contract, they may make some other demands upon you afterwards.

If two small ships were sent, I conceive it would be more advantageous than one that would carry as much as both; for if any difference should arise out of the natives' jealousy, &c. the two would undoubtedly be better able to defend themselves, and to keep them in awe till they could give a proof of their behaviour, which ought to be extreme civil towards them, without the least shew of fear or distrust. However you cannot be too much upon your guard. Moreover, two ships could sooner dispatch loading, for one could go up to the town, and stay there whilst the other should anchor against the mouth of China River. This would save the loss of many a day, when the rains prevent the bringing down the pepper so far to the ship, besides the time spent in going and returning; whereas the ship that lies in town and alongside or near the house (being according to custom cajaned or thatched over the deck) might take in and garble the pepper in all sorts of weather, having one mill on shore and another on board, which would certainly save two-thirds of the time it would take in carrying it down in boats; and when she had thus got her full loading she should fall down the river, and the other might come up in her room: but both should by no means be trusted up at one time, unless the trade were better established than it is as yet. The Company did send with us instruments for garbling the pepper, but we did not use them, having made there a kind of mill much easier to be built than described, wherewith we garbled or cleaned ten times the quantity of pepper in a day more than the other would, and with much less trouble, as being more convenient in every respect. As to your pepper-dust you ought not to heave it overboard, for the natives will drive down after it in their boats, scum a great part thereof up, dry it, then mix it with their pepper and sell it to you again, besides, I doubt not but the Chinese would give something for it: for, as the Banjareens informed me, they make no difference between that which is free, and that which is full of dust, but load all together in their junks without garbling. You will every day have the provisions above mentioned brought to your door by the men's wives in the town; but you must be very careful to keep your folks from affronting them, and you need not fear being supplied while you lie there.

You will be first mightily crowded with people of all sorts, under pretence of buying or selling; and you must bear a little with their impertinence: but to prevent the ill consequence of affronting them, and to hinder them from pilfering, which the poorer sort are much addicted to, it is but hiring a house large enough, which you may do for about fifty pieces of eight, and separate it into different apartments, according to your stations, and leave one large room to meet these people in, and to weigh and pay for your pepper: not but that you will be obliged to carry into your private apartments some of the topping dealers, with whom you are obliged to have private conferences; but you must refuse that liberty to the ordinary people from the very first. One of the reasons why I propose your having a house there, as we had, is the great advantage you will have of keeping your ship clear, which otherwise would be like a fair, full of perpetual comers and goers; whereof some, under pretence of buying and selling, would not only pilfer whatever they could lay their hands on, but greatly hinder your folks from doing their duty, and often create differences between them and the sailors.

You ought to look upon the Chinese there as your enemies at bottom; however be always civil to them, as they to outward appearance are always to you: you may also turn a penny with them in many things that the Banjareens are strangers to. They are complete merchants, and know very well the value of all sorts of drugs, diamonds, and other goods.

The Banjareens are strangers to the price of your commodities, which I shall mention hereafter, and you must ask twice as much as you intend to take: for though you deal with the best of them, and assure them that what you ask is only a small profit, yet, having first desired you not to be angry at the price they are going to bid, they will offer you one quarter, or never above half what you ask. They are cunning wheedlers, and always complain of poverty; but be sure that whatever they sell you, they will ask enough, and often ten times more than they will take; therefore you ought to be cautious in bidding little enough. If you barter for goods, trust not their sample, nor their weights, but try the latter by your own, and take care they shift them not, for they are as dextrous at that as sharpers are in shifting dice at play, though they assure you never so much to the contrary. You must sort your goods and theirs, and as you deliver the one, take the other; however, you will not be long there ere you find out the fairest dealers in town. To prevent your buying knowledge so dear as others have done, I recommend, as a very honest man, Cay Deponattee, so often mentioned by me, otherwise entitled Kin Abee, a very topping trader, whom, if still alive, you will soon meet with there; as also Pangeran Purba, Prince of Negarree, Cay Rattattee, and Cay Demon, may claim the name of candid honest men. The shabander is likewise a man of a fair character, and one whom you ought to keep in with. His business is to collect and look after the Sultan's customs; you will find him a servicable man. They will insist, if you buy your pepper by weight, to have it weighed by their dotchin or stilliard, which you may do; but be sure try it first by your own weights, and keep it in your own custody; not trusting it back again to them while you lie there, lest they should deceive you by another like it; for they want no cunning nor design, esteeming it no dishonest thing to cheat another with false weights and measures; for very few are honest among them but by good looking after: therefore when you buy their goods, trust not to themselves to weigh them, for which they will at first cavil very much, they having a method of cheating thereby more than you are aware of.

Their great weights are a peccul and a catte: a catte is twenty-two ounces nearest; one hundred cattes make one peccul, which is one hundred and thirty-two pounds English avoirdupoise weight. Their small weights are a tiall, mas, tela, and mata boorong.

Three mata boorongs make one tela; six telas one mas; sixteen mases one tiall; one tiall is one ounce eight pennyweights troy weight.

You ought to carry no dollars under seventeen pennyweights nine grains; for the Banjareens will take them on no account; therefore it is very proper to weigh a parcel of your dollars, ere you arrive there, and reserve the heaviest till last; otherwise they will cavil at taking those of seventeen pennyweights nine grains. If you have more money than will purchase pepper enough to load your ship, there is gold to be purchased, which will turn to good account, if well bought: and also diamonds, brought from Succadana, from three carats downwards. You buy your gold paying so many dollars in silver for one dollar weight of gold. Now if your dollars be more than seventeen pennyweights nine grains, they will stiffly insist on having so many of those your dollars for seventeen pennyweights nine grains of gold; which must by no means be complied with. The following table may be of service to the ready payment, especially of the Chinese, who dwell there, and might be brought more readily to take your weight of silver so, being their own custom in China.

## A Table of Dollars of Banjar reduced into Troy Weight.

Dollars.	Ounces.	Dwt.	Grains.	Dollars.	Ounces.	Dwt.	Grains.
1	0	17	9	80	69	10	0
2	1	14	18	90	78	3	18
3	2	12	3	100	86	17	12
4	3	9	12	200	173	15	0
5	4	6	21	300	260	12	12
6	5	4	6	400	347	10	0
7	6	1	15	500	434	7	12
8	6	19	0	600	521	5	0
9	7	16	9	700	608	2	12
10	8	13	18	800	695	0	0
11	9	11	3	900	781	17	12
12	10	8	12	1000	868	15	0
13	11	5	21	2000	1737	10	0
14	12	3	6	3000	2606	5	0
15	13	0	15	4000	3475	0	0
16	13	18	0	5000	4343	15	0
17	14	15	9	6000	5212	10	0
18	15	12	18	7000	6081	5	0
19	16	10	3	8000	6950	0	0
20	17	7	12	9000	7818	15	0
30	26	1	6	10000	8687	10	0
40	34	15	0	20000	17375	0	0
50	43	8	18	30000	26062	10	0
60	52	2	12	40000	34750	0	0
70	60	16	6	50000	43437	10	0

Dollars.	Dwt.	Grains.	Decimal parts.
$\frac{1}{2}$	8	16	.500
$\frac{1}{4}$	4	8	.250
$\frac{1}{8}$	2	4	.125
$\frac{1}{16}$	1	2	.062
$\frac{1}{32}$	0	13	.031

For example: admit you had purchased 40 dollars weight of gold, at 10 dollars per dollar weight of 17 pennyweights nine grains, in the table you will find against 40 dollars weight, 34 ounces 15 pennyweights; which by the following table of ounces troy reduced into tials, mases, telais, and mata boorongs, is of their weight 24 tials, 13 mafs, 0 telai, 2 mata boorongs, and .57117 decimal parts: but if you pay them 10 dollars weight for the weight of 17 pennyweights 9 grains of gold (as they will insist on, especially the Banjareens), there will be a great difference to your loss when you purchase gold with your heavy money, if there be any left, as generally there is.

A Table of Troy Weight reduced into Weights of Banjar.

Ounces.	Tial.	Mafs.	Telai.	Mata Boorong.	Decimal parts.
1	0	11	2	1	.71428
2	1	6	5	0	.42856
3	2	2	1	2	.14284
4	2	13	4	0	.85712
5	3	9	0	2	.57140
6	4	4	3	1	.28568
7	4	15	5	2	.99996
8	5	11	2	1	.71424
9	6	6	5	0	.42852
10	7	2	1	2	.14280
20	14	4	3	1	.28560
30	21	6	5	0	.42840
40	28	9	0	2	.57120
50	35	11	2	1	.71400
60	42	13	4	0	.85680
70	49	15	5	2	.99960
80	57	2	1	2	.14240
90	64	4	3	1	.28520
100	71	6	5	0	.42800
200	142	13	4	0	.85600
300	214	4	3	1	.28400
400	285	11	2	1	.71200
500	357	2	1	2	.14000
600	428	9	0	2	.56800
700	499	15	5	2	.99600
800	571	6	5	0	.42400
900	642	13	4	0	.85200
1000	714	4	3	1	.28000
2000	1428	9	0	2	.56000
3000	2142	13	4	0	.84000
4000	2857	2	1	2	.12000
5000	3571	6	5	0	.40000
6000	4285	11	2	1	.68000
7000	4999	15	5	2	.96000
8000	5714	4	3	1	.24000
9000	6428	9	0	2	.52000
10000	7142	13	4	0	.70000

Pennyweights.	Mafs.	Telai.	Mata Boorong.	Decimal parts.
1	0	3	1	.2857
2	1	0	2	.5714
3	1	4	0	.8571
4	2	1	2	.1428
5	2	5	0	.4285
10	5	4	0	.8571
20	11	2	1	.7142



The Banjareens cast up the fums or accounts, as the Chinese do, by small things like button-moulds, on sundry sticks placed in two rows in a box. These they shove up and down very nimbly with their fingers, and are very exact and expeditious. They are naturally very docile and inquisitive, for most of the best traders had learnt from us, the little time we were there, to understand our figures and way of counting; and, when they sold us pepper, would set down their sundry draughts, (tens in a fum) then add their totals together at last.

If the trade was continued annually, it would improve greatly; for on the certainty of the China junks meeting here with the English ships, you might be well supplied with China goods near as cheap as if you were to go to China for them, considering how much longer the voyage is, the great expences thereof, the Emperor's customs, the port-charges, and other extraordinary fums exacted from the supercargoes by the hoppers, &c. they can settle the trade, and leave the port: I am sure at least, that some advantage may be made hereof. Moreover, the Macassar praws come in here yearly about the latter end of September, and bring slaves, cloves, nutmegs, mace, gamboge, cassia-lignum, and sundry other merchandizes; with whom some money may be laid out to advantage.—Note, that we paid no custom here but for pepper.

The Banjareens have only one crop of pepper every year, though I have been told that they had two; for the latter is only what sprouts out of the stocks after the chief crop is gathered, and it never amounts to any great quantity. It is gathered only by the poorer sort, whom necessity obliges to do it: however, the gathering thereof doth much prejudice the ensuing crop.

Of black pepper they have three sorts: the first and best is called Molucca, or Lout pepper; the second, or middling sort, is called Caytongee pepper; and the worst, Negaree pepper, of which last sort they have the greatest quantity: it is a small, hollow, light pepper, and the most full of dust; therefore in bargaining at first with them, you must agree to buy by weight, and not by measure, otherwise they will shuffle you off with the lightest and worst sort, reserving the Molucca and heavy sort for the Chinese, who buy by weight. If you are not cautious, they will mix small black stones with the pepper, which are not easily discerned, neither can your garbling-mill throw them out; which would be a double loss in paying pepper-price and freight for stones. Their measure is the ganton, which contains about a Winchester gallon.

They have white pepper, which is commonly sold for twice the price of the black. They tell you that it is made white by a certain bird, which they call ballaree, that lives on black pepper, digesting nothing but the husk, and dunging out the substance, which through this means becomes white, and is gleaned up by the poor people, of whom we always bought it by very small parcels at a time. Their best long pepper, free from dust and worms, is sold at about four dollars per pecull.

Besides pepper, they have plenty of birds'-nest, the best in the world, which are sold at ninety or one hundred dollars per pecull; the whitest and clearest is the best. It is so called from certain birds, much after the nature of a petrell, or swallow, which (as they tell us) having swallowed the scum, spawn, and froth of the sea, fly into the holes of the rocks, and high cliffs near the sea, where they vomit it, and beat it up with their wings into a consistency, which serves them that season as nests, (for they make new ones every year) and after they have abandoned them, the natives do gather them, being then a hard substance, and sell them at the aforementioned price. This bird's-nest is counted a great provocative to venery.

Their sanguis draconis, or dragons' blood, is also the best and finest in the world; it is the juice of a tree, whose fruit is as red as a cherry: the best is known by its

bright colour, when rubbed on paper. They bring it to you in small drops about an inch long each, wrapped up in leaves, or flags, and will endeavour to persuade you to buy it so; which you must not comply with, unless you are willing to buy a pig in a poke, by trusting to their honesty. The best is sold out of the leaves at about forty dollars per peccul.

Here are Jambe canes, which, if you pick them, they sell for four dollars per hundred. We bought several of them, which to the eye seemed very beautiful, but in two or three days proved to be good for nothing, being shrivelled up; which happened by reason they were not cut in a proper season, and not come to their full growth, or rightly cured, which is done by fire and bees'-wax; whereby the outward rind is hardened, and hindered from falling in and shrivelling, as aforesaid. They have also plenty of rattans, iron-stone, and very good loadstone.

Their gold is of three sorts, distinguished by head, belly, and foot. The head, called also Molucca gold, is in grains as big as bay-salt, of a very irregular shape. We bought some (and I reckon it dear) at eleven weights of silver for one of gold. The belly is a smaller sort, like sand or brass filings, and is sold at ten weights of silver for one of gold. The foot-gold is the same to outward appearance; but is sold at nine for one: however, I do not question but, when a trade is fully settled with them, it may be bought cheaper. I find the belly-gold, according to the differences of the aforementioned prices, the most profitable to buy.

If you buy any in bars, cut them half way with a chizel, then break, and touch them; for very often they will cover a base metal so artificially with gold, that if you cut it quite through with your chizel, instead of breaking it, you will draw the gold over with it, and prevent the discovery. The Molucca gold has no artificial alloy, and comes up in fineness to about twenty-two carats English: the belly and foot gold, being more uncertain, is often found with more or less quantity of iron dust, or something much resembling it, and comes so out of the rivers. The natives do clear it by the help of a loadstone, which they rub amongst the gold dust in a shell or dish; whereby the loadstone draws out most of the iron particles; but for want of better knowledge, they can never get it clear out; therefore you cannot be too circumspect when you buy any. They esteem the highest coloured gold the best, provided it be without alloy, as it always is when in dust. Now I have spoken of their gold, I call to mind a pleasant notion that they generally believe to be true. I often enquired of them why they held up the price of their gold and diamonds so very high, since the country afforded so great a plenty of both? They always answered me, that they had great trouble, difficulty, and danger, in getting thereof out of the earth; that the devil, who is the sole master of all the gold and diamonds that lay hid in the earth, often appeared to them in the mines, striking some of them dead on the spot, afflicting others with sickness, &c. and that when he suffered them to get any into their possession, it was chiefly to serve his own ends, by setting them, and the rest of the world together by the ears about it. This notion proceeds from the damps that frequently kill those who work in mines: and as to seeing the devil, it is only what we call Will in the wisp, as I have already mentioned.

They have likewise the best unrefined camphire in the world; but that being out of my knowledge, I bought none; neither can I tell the price, or different sorts thereof.

The fine monkey bezoar is here sold at four or five times the weight in silver. The best is of a greenish, or olive colour. You will find some in size from a penny-weight, to an ounce and upwards. I question whether these very large ones are monkey, or goat bezoar: however, the natives value them at a greater rate for being large.

large. They are very dexterous at making false stones, which appear so like the true bezoar stones, that unless you take great care, you will be often deceived. The best way to try them is thus : rub on a piece of white paper some white-lead, lime, or chalk ; then rub your bezoar thereon : if it be good, it will turn the white-lead, &c. to a greenish colour. Here is also a sort of bezoar, called by the natives golega derre landack, which gives a pleasant bitter taste to wine, water, &c. when infused a small time therein ; and yet there appears no visible diminution of its substance.

As to an investment outward, a small matter for a private trader, may turn to account, viz. iron bars, small steel bars, small looking-glasses, hangers with buckhorn handles, sheet-lead, beautiful callimancoes, knives without forks, proper mixture of cutlery-ware ; the smallest sort of spike nails, twenty-penny nails, small grapplings of about forty pounds weight, and small guns from one to two hundred weight, without carriages ; red leather boots, spectacles, proper sortment of clock-work, small arms, brass-mounting bell-mouth-iron blunderbusses, ordinary horse pistols, gun-powder, a few scarlet-worsted stockings, &c. But now I think it is time to proceed on the journal of my return through the Straits of Bally, wherein I shall be the more particular, by reason those straits were seldom or never navigated by any of our country before, especially in the westerly monsoon, which is the only time we are obliged to attempt it.

CHAP. III.—*Giving a Description of the Island of Madura, the City and Kingdom of Ballamboang, the Straits of Bally, Cape of Good Hope, the Islands of St. Helena and Ascension, &c.*

WE steered our course by log south-south-west having little wind at west by north, in order to get sight of the east end of the island of Madura : and the next day, being the 25th of December, I saw the island called Arients, bearing south by west distant about six leagues. At first I took it to be the island called Nisse Solombo, but found my mistake, being carried away by the current near eight leagues to the eastward of my reckoning in so small a run, having little wind and fair weather : not being able to weather it, I stood along the shore, and had good soundings ; but we were greatly surprized when we found the water on a sudden shoaling from twelve fathoms to three and three-fourths ; and upon examination, the water being clear, we could see rocks at bottom, and found all along the shore uncertain shelves of rocks and depths of water, which you may be hurried on or over by the great currents ; so that it is very dangerous coming near that shore, without you are very well acquainted with it, and have a commanding gale. The wind coming about to the northward of the west, we laid up pretty well, and at six in the evening we saw the islands Solombo and Nisse Solombo, but came not near enough to be able to give any particular account of them : however, I have been credibly informed that beef especially, and other provisions, are very cheap there. We steered away south-west all night, with little wind, fair weather, and a very smooth sea, sounding every hour till seven the next morning ; and had from thirty to forty-three fathom water. At twelve at noon this day, being the 27th, Poolo-Pondy bore south, and the east end of Madura south-west by west half west about five leagues ; and I found by my reckoning, that the end of Madura lies south-half-west distance sixty-seven leagues from Tomberneo road. At this time of year there is a strong current sets to the east-north-eastward.

December the 27th, we had the wind at north-west, squally the first part, the latter fair weather : I stood along shore between Poolo-Pondy and Madura, according to the best directions of the drafts, and our own judgments, in order to get into the south-east

east great bay to buy some provisions, and recruit our fresh water, believing this might be the last place we should touch at till we came to the Cape of Good Hope. I found very good gradual soundings according to the directions of our sea-cards, till I came to the northernmost point of the bay, which is the easternmost point of the isle of Madura, where on a sudden the water shoaled from four fathoms and a half to fourteen feet, and my ship struck fast on a shelf of coral rocks at four in the afternoon, which happened the more unfortunately because it was at the time of high-water: we endeavoured to back her off, but to no purpose, so that in less than a quarter of an hour the ebb came on so strong that we could not get out an anchor, neither could the long-boat row a-head with seven oars. Finding no remedy but patience till the next tide, we struck the yards and topmasts to ease her; for the tide setting on her broadside at the rate of five or six miles an hour, had wrung her over several rocks, so that had she not been very strong it might have ruined her; for at half an hour after ten at night, it being low water, and the ship sewed eight feet, we could see where best to lay our anchor, which accordingly we did, and at eleven the tide set strong to the north-north-east, it being on the change of the moon, whereupon we got her off without any visible damage at that time, and anchored in the offing in five and a half fathoms water, and oozy ground. In coming from the northward on going into this bay, or through between the aforesaid islands, you will see a pleasant town on the starboard side; and if you come no nearer the shore of Madura than five fathoms water you can receive no damage.

December the 28th, wind at north-west, squally weather, we weighed and run into the bay, giving the point aforesaid a large birth, at two in the afternoon, where we anchored in five fathoms water. This bay lies in the latitude of six minutes forty-eight degrees south, and longitude one hundred and eleven minutes twenty two degrees from London; the south-east end of Madura bearing south-west by south, the easternmost land north-by-west, and Pooly Pondy east-north-east. Here is very good riding, and also good victualling very cheap: as oxen, buffaloes, fowls, eggs, salt, tamarinds, sugar, lemons, oranges, and most sorts of other fruit. We lay here seven days, fitted up our boats, fished the bolt-sprit, salted up provisions, and filled our water. We went ashore about a mile within the north point of the bay, where lies almost at high-water mark a prodigious large scull of a whale, which has been there above three years. This scull may be seen from the ship, if not gone, and will serve to direct where to land, it being the properest place. As you go ashore with your boat, you will find in sounding a long shelf of land and rocks that lie between you and the shore, which those who sail that way ought to be acquainted with, should they have occasion to turn their ship farther up the bay: the said shelf is nearest the shore.

The natives are very treacherous, therefore you ought to go well armed, and not straggle far up into the country. They are in stature, countenance, and dress much like the Banjareens, by religion pagans, and are governed by a Raja of their own. The soil is of a reddish colour, but very fruitful; part thereof being covered with pleasant woods and groves; part fine fields inclosed with hedges that are full of silk-cotton trees, which afford both profit and delight. The houses are built with bamboos, and covered with cajan-leaves, the floors being generally laid over with curious mats. Their towns are situated among agreeable groves of cocoa-nut and pomegranate trees. I saw no other grain but rice and maize, or Guinea corn.

We pitched a tent by the sea-side, where we lodged some of our men night and day, but I would not advise the practice thereof again, it being very dangerous, as will appear hereafter. Hither the country people, men, women and children came down to us with all sorts of provisions. We killed our beef about sun-setting, then cut it up and salted it before sun-rising, it being the coolest time. The water we got there was but indifferent,

indifferent, the wells being near the sea-shore, ebb and flow with the tide; so that the water cannot be very fresh, being drained only that short space through the veins of the earth: it is always best at low water.

In all these parts you find somebody who has the title of Shabander, and seems to govern the rest in respect of trade, and exchanging your money, to whom some small present must be made. We had not been long on shore ere the old shabander came to us, and charged us, as a friend, to be gone from the place, or else it would be worse for us; whereupon we all went on board the same evening, which, if we had not done, I do not question but we should have repented it. I did not know the danger thereof till afterwards. The reason it seems was, that after we had settled the prices of the provisions we wanted with the shabander, several of their own people stole their neighbours' oxen, &c. and in the shabander's absence brought them to us, and sold them at a cheap rate, then ran away with the money and hid themselves, and left us to be punished for what we were innocent of. This, it seems, is a trick they commonly put upon strangers, therefore I thought fit to give other persons a caution thereof that they may avoid it, which may be done by buying only of the shabander, or such of his friends as you will soon find out, or in his presence.

Having got all things ready, we weighed on the fifth of January, about six in the morning, and stood away south-south-west, and south-west-by-south, from the south point of the bay. Note, that in running out this bay, if you are bound for the streights of Bally, it is best to keep the south point on board, in about eight, nine or ten fathoms water, and not farther from the shore; to which you have gradual good soundings; but farther in the offing are sundry shoals, funk rocks and uncertain depths, which are not laid down in any sea-cards as ever I saw. We were like to have run on one of these shoals in the day-time; but seeing the water coloured, we avoided it, brought to, and sent the boat to sound where we found no more than eleven feet water, though a ship's length farther we found fourteen fathoms, so that there is no warning, by soundings there. This shoal is a quarter of a mile long, lying north-east, and south-west nearest. When you are on the rocks or shoal the south-east end of Madura will bear west-half-south, and Poolo Pondy north-half-east. These shoals are the more dangerous, because of the uncertain strong currents; but whoever follows the foregoing directions may go safe in and out of this bay.

The course from the south-east point of Madura to Cape Zandareen is south-south-east distant about twenty leagues, and no danger between, but what is called in our cards Muyden's rock, which is there very erroneously laid down; its bearing from the north-eastermost point of Java is south-by-west, distant eight miles. Neither is it a rock as the cards represent, but several shoals of sand that lie east and west, a mile and more in length. Some at high water are just covered, and the highest is not to be seen above a mile in the day-time. I failed all round them, and had no ground with eighty fathoms of line, when we were within musket-shot of the said shoals.

The said north-east end of Java is exceeding mountainous, and may be seen plainly from the aforesaid Bay of Madura. South half east, from the said point, distant about two leagues, is the cape called Cape Zandareen, being a low rocky point, but steep withal. From Cape Zandareen to Poolo Gilleboang, which is a small island lying about a third part over the entrance of the streights of Bally, the course is south-by-east half-east distant about four leagues. The island is low, full of trees and breakers all round, but you may sail on either side, giving the island a good birth. I failed to the westward, between it and Java, and could get no ground with our lead. The Passage there is very narrow, but between the island and Cape Zandareen is a large Bay

bay, where there is good anchoring. Near the shore are two or three fisheries, where several rivulets fall into the sea, and one large cataract of water from a very high hill that falls not above one hundred yards from the sea-shore.

I anchored one evening there, and being willing to take in fresh water, I went with the long boat, manned and armed, to seek some. We discovered a small village near the shore, which we made towards, and perceived that on our approach the people were in a great fright and confusion; for, it seems, very few of them had ever before seen any Europeans, or white men; the women and children flew into the neighbouring woods, and the men made down towards the strand, being in number between twenty and thirty, all armed with long spears, and poisoned daggers; their bodies stained, and naked, all but their privities: they are tall, strong men, and speak the Malayo language. I ordered the boat on shore at once amongst them, where I landed with one Mr. Richardson, a passenger, having left all the arms in the boat, except our pocket pistols, and ordered our men to keep in it, and make no shew of arms without they should see them offer to affront us. One whom I suppose to be their chief, seeing only us two, advanced from the rest, and met us half way: we took each other by the hand, in a very friendly manner; and after the first salutations, I informed him that we were not Dutchmen, (whom these people have a great hatred for,) whereupon he gave a signal, and the rest laid down their weapons, and came in a peaceable manner to us. They informed us where we might water; and indeed, were very kind and generous; for I thought they would never have done presenting us with dried venison and salt-fish; in return of which, I gave them tobacco, arrack, knives, and empty bottles, which we had in the boat, and were very acceptable to them. After we had spent an hour in chatting with them on the beach (for we went not to the town,) the night approaching, we returned on board. As we rowed close along the shore, it being dark, we were mightily startled at a great noise, rustling and bounding that we heard in the neighbouring wood; but we found afterwards that it was a large herd of deer, who were drinking at a small river, and being frightened at the noise of our oars, made this bustle in rushing through the woods.

That night we had a violent tornado, that forced us to sea, with the loss of a new anchor and cable, and drove us over to the aforesaid bay on the island of Madura. From our first sailing from the said bay, to get through the streights of Bally, we were fifteen days, though it be not above thirty leagues, and in the westerly monsoon; at which time a person, who is a stranger to the coast, would think it not above twenty-four hours work. At last we fell into the following knowledge and method, otherwise we could not well have got through at all; for once in twenty-four hours you have a southerly wind from the sea, blowing through the streights, and is right against you, coming on like a tornado, and blowing with such force, (being always attended with violent rain) that at first coming on you will be obliged to hand all your sails, till the strength of it be over. The reason I take to be, (for on the other side of the streights, in the road of Palamboan, or Ballamboang, you shall only see it, and never feel it,) because the streights, not being wider than in the river Thames, and having steep mountains on each side, whose tops generally overlook the clouds, the wind coming out of the wide sea, though in a gentle manner, gathers, hangs to, and is increased by those clouds; so that it is obstructed and contracted by the narrowness of the passage, till it forces its way through at once, in a manner like wind forced through a tube, or through the nozzle of a pair of bellows, but seldom lasts above an hour or two; though not a quarter of an hour in its greatest violence.

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You always have timely notice before it comes, so that when you would pass to the southward, it is advisable to keep the coast of Java on board, steering along shore, within a mile or two with the northerly sea-breeze, which lasts till the other comes from the southward, till you run four or five leagues to the southward of the north-east end of Java. Then you will open a black sandy bay, which reaches to Poolo Gilleboang : and when you see the tornado beating up in the streights a-head of you, which may be discerned for about an hour before it reaches you, then get near enough into that bay to anchor ; for it will suddenly fall calm, and the current will horse you out again : however, the current runs not always to the southward, but you will find many eddies ; so you must night and day attend the northerly breezes, and anchor in that bay, before the other comes on ; otherwise you will lose by the latter more than you gain by the former, and never get through. Note, that there is no safe anchoring before you reach that bay.

On the 15th of January we were in the streights ; and it was but a very dismal prospect to see those vast mountains on each side, which by the narrowness of the passage seem ready to fall upon your head ; and the noise which the sea makes in the hollows of the rocks is most frightful. Sometimes you have gusts of wind from the hills flying round the compass in three minutes time, and then as suddenly it becomes calm ; so that I would advise you to keep a boat a head, to prevent your being swung round by the circling eddies, occasioned by the rapidity of the current to the southward ; by which means, when once you are entered the narrowest part, you are soon through, and the danger is not by half so great as may be imagined.

The next day we anchored in a bay over against a pleasant town on the isle of Java, called Ballamboang, or Pallamboan, where we designed to fill all our empty water-casks, and take in new supplies of what we wanted. This town and road lie so convenient for watering and victualling, that I shall enlarge a little upon it.

Ballamboang is situated on the south-east part of Java, near the passage, between that and the island of Bally in the latitude of eight degrees thirty minutes south, and in the longitude from London of one hundred and eleven degrees thirty minutes, having fine meadows, and a pleasant champaign country for many miles round it. Near the sea the soil is sandy, and there are several small rivers on each side of the town, where you may go with your boat, and water at half tide over the bars ; but you must not forget to carry a grappling, for you have sometimes an ugly surf on the shore. The country affords plenty of oxen, the best and largest I ever met with out of England ; also buffaloes, deer, hogs, ducks, geese, fowls, eggs, goats, rice, Indian corn, potatoes, yams, cucumbers, and all sorts of delicious fruits ; all which are wonderful cheap : also plenty of very fine fish, either fresh or dried.

This town, or rather city, is the capital of the kingdom ; it is called in our maps Palamboan, and in some Palambuam ; but the natives pronounce it Ballamboang, and it gives its name to the whole kingdom. Here the King generally resides, but sometimes also at a place about fifteen miles up in the country, which is called Cota, signifying a castle. He styles himself Raja Mas Boogoos Pettey. His kingdom extends itself about seventy or eighty miles from the east-end of Java, along the southern parts and from north to south, along the east end of Java, about fifty or sixty miles. As to the north and west bounds, I can give no account. He is a great Prince, and very absolute ; by religion a Pagan, as are most of his subjects. There are some Mahometans, and a few Chinese.

On our first anchoring they were under an alarm, and had sent to their King, who was in the country, and came down immediately to them before our boat had got



ashore, in which went our purser, and Mr. Richardson, who speaks the language. I gave them arms, and cautioned them to be always upon their guard, to use them civilly, and let them know that we wanted only provisions, wood and water; for which we would pay very honestly. Now there was a Chinese among them, as a shabander, who, seeing our colours, knew us to be English, and told the King what we were, assuring him that we were not Dutch, of whom they are very jealous; and indeed not without reason, many cruelties having been exercised by them in the western part of the island. Upon these assurances, the King seeing the boat make towards shore, came himself in a flying prau, with his colours displayed, gongs beating, and several attendants in other boats, to meet ours a little way off from shore.

After knowing by enquiry, who they were, and what they wanted, the King told them they were welcome, and should be supplied; desiring them to tell their captain, that he would be glad to see him on shore the next day. In the evening the boat returned with some fruit, &c. and gave me the foregoing account; adding, that they seemed to be hearty, civil people.

Accordingly, next morning, I went myself, with several others, besides about twelve sailors, being all well armed. Before I reached the shore, I was met by the King, with his attendants, who welcomed me and told me, he was very desirous to see my ship, having never seen one in his life. I was much surprized at his freedom, in venturing so suddenly on board; but afterwards I understood it was owing to the afore said Chinese, who assured him that the English were very generous, civil people; that they traded to his country, though the Dutch were not suffered to come there, &c. I told him I would return with him, and asked if he would please to come into my boat, which he readily complied with. He was dressed in a short black velvet jacket, trimmed with narrow gold lace, an ill-shaped red cap on his head, with abundance of gold and stone rings on his fingers. When we arrived on board I made him heartily welcome, treating him with arrack and wine; the former he drank very plentifully of, but the latter he did not so much care for. He enquired my name, and set it down, as I pronounced it, in his own writing, which he seemed to be very dextrous at; then he pronounced it very properly, and said he would remember me if ever I came again. We then set out all together in my boat for shore. I ordered the gunner to fire some guns, which he did, as soon as we got clear of the ship; wherewith the King was wonderfully pleased, and returned me many thanks. His attendants were such prodigious thieves, that we had much ado to watch, and keep them from stealing during their stay on board. As to the King, for a rough, unpolished man, I think I never met a better in my life. When we landed, he conducted us to his palace, which was a large square, palisadoed in, with several little rooms and apartments for his women, &c. We were not long far cross-legged, when he made us an apology, and having drawn up five or six of his soldiers, with matchlocks, he saluted us by way of thanks for our great guns. Then he gave us a dinner, according to their best manner, consisting of venison, currees, rice, fowls, &c. His oran-cays kept all at a great distance, and shewed him very great respect. He took great delight in making some of his attendants drunk with our arrack. We had not long dined ere about thirty of his wives or concubines entered the place, and passed by us one by one, each having a slave to attend her; who bore on their heads fundry sorts of the best fruit, and presented us with so great a quantity, that it was more than our boat could carry off at once. The King also presented us with two oxen, three large deer, one buffaloe, and several bags of rice, with ducks, geese, hens, &c. amounting full to the value, if not more, than what I presented to him.

After dinner two of our gentlemen rode out on horseback, a little way into the woods; which abound with deer, wild peacocks, and several other kinds of fowls. Their horses are small, but very beautiful and fiery; a remarkable instance of which I was eye witness to: for the King knowing that they were gone out on horseback, said he would shew me some sport, by which I might know which of these two English gentlemen was the best horseman. I wondered what his project was; when he led me out by the hand, several of his men following us to the wood-side: he had placed two of his soldiers unknown to me behind a bush; who, as soon as the horsemen came by, fired their match-locks across the horses' noses, which made them start, kick, caper, and bound in a strange manner; so that they were not to be governed. One of the riders was thrown off, the other with much difficulty kept his saddle. The King seemed much delighted with his project, and laughed very heartily; but you may imagine how the gentlemen were frightened, especially at first.

We staid here six days, in which time we had victualled, watered, and cut wood enough, they being all the while very civil to us. He told us, that he tarried there only for our sake, lest there should happen any quarrel between his subjects and us, or lest they should steal any thing from us, &c. However, about noon he went up into the country; neither was he long gone, when some of us had reason to be sorry for his departure: for the pursuer having some little business to settle with the shabander, as he was passing through a narrow lane towards the boat, being accompanied by the King's brother and another man, the former having asked him what it was o'clock; the pursuer pulled out his watch, and upon his desiring to see it himself, he gave it into his hand, which he no sooner got hold of, but he took to his heels, the other man holding a spear to the pursuer's breast whilst the King's brother ran away, whom he afterwards followed, and left the poor pursuer to pursue his way to the boat by himself, being glad to come off so. You may guess what a princely spirit the brother had.

Few or none of the natives ever saw any white men before, this coast being hardly ever navigated by any Europeans: however, this place is mighty convenient for all ships that make their passage this way home through the straits of Bally, to prevent their being forced to lie during the westerly monsoon, and losing so much time on demorage, which would be a great charge to the Company. If you ride well in the bay in about five or six fathoms water, you will have good anchoring.

I made great inquiry of the product of their country, but found them in many different stories, yet generally they acknowledge that they have gold, pepper and cotton in great plenty; however I believe they are not willing to let any foreigners, much less Europeans, know the riches or trade of their country, lest they should force a settlement, which is no difficult matter to accomplish.

On Sunday the 23d of January 1714-15, about eight in the morning, I sailed from thence towards the Cape of Good Hope. We stood away to the southward with the wind at west-north-west and west-south-west, mostly in hopes of meeting the south-east trading-wind in the latitude of twelve or thirteen degrees south, as in other parts of that sea, but found the contrary; for the monsoon blows between this place and New Holland six months one way and six another, viz. from October to April between the west-north-west and west-south-west, and from April to October again at east-south-east nearest. We got into the latitude of twenty degrees south, but saw no land; therefore do find the coast of New Holland to be laid down in all our cards near twenty leagues more northward than it really is. I was almost out of hopes of getting into the south-east trade-wind time enough to save my passage round the Cape, having spent so  
much

much time in beating to the windward, but in vain, for we met with very hard gales : therefore I tacked to the north-westward on the 19th of February, having the wind at south-west and south-west-by-west, and on the 21st following, in the latitude of eighteen degrees south, having gained two hundred and seventy miles to the westward of the south-east end of Java, I met with uncertain winds : and on the 23d I met with the fixed south-east trade wind, stout gales, which held us till the 24th of March following, to the latitude of thirty-three degrees forty-eight minutes south, and four thousand three hundred and twenty-three miles to the west of the south-east end of Java. This made us amends for the former loss of time, running us to the rate of one hundred and forty to one hundred and seventy miles in twenty-four hours time.

Now our fair trade-wind had left us, and we had nothing but uncertainty to depend on, being seven hundred and eighty miles distant from the Cape ; and our water falling short, we were forced to allow but a quart each man for twenty-four hours. On the 4th of April we came to an anchor in Table-Bay, at the Cape of Good Hope, in the latitude of thirty degrees south, and longitude from London sixteen degrees thirty minutes. Our men were most of them sick and down with the scurvy, occasioned by the length of our passage, so that we had scarce men enough to furl the sails and bring the ship to an anchor without great trouble and risk. We spent here thirty-eight days, being obliged to have our sick men ashore ; however the repairing our ship, which had suffered very much in beating betwixt the streights of Bally and New Holland, and also re-victualling our ship, was the occasion of our tarrying here so long. During our stay here I buried my chief mate, which was no small loss to us, for he was a very good officer, and my cooper.

This place for its pleasantness, fertility, wholesome air, and convenient situation for the supply of both homeward and outward bound East India ships, is not to be paralleled, whereof the Dutch to whom it belongs are not a little proud. The town is situated on a small ascent on the side of the bay, and consists of about two or three hundred houses built with stone, about two or three stories high, having pleasant rows of trees before the doors. There was formerly a drain of water that ran through the town : this they have lately turned into two canals, and built the sides up with stone, which adds much to the beauty of the town. Here is one large church, a handsome hospital, and a pretty large castle, garrisoned and kept in good repair, which commands the bay : it is not very strong, but sufficient to answer the design it was built for. The governor has a handsome dwelling-house therein. At the upper part of the town is a very large fine garden belonging to the Dutch East India Company, which is surrounded partly with a wall, and partly with a ditch, consisting of many very beautiful walks, and several banks and canals, which have indeed been lately neglected, and are much run to ruin, but the then present governor was about repairing them. Here is great abundance of good fruit, and variety of physic-plants and trees, as aloes of different sorts, dragons-blood, and camphire-trees, with several others past my observation. In this garden is likewise a house, built for that purpose ; wherein is kept a collection of the skins of a multitude of strange beasts which Africa is famous for, so artificially and nicely stuffed, that at first you would be surpris'd at them, and would believe them to be really live creatures, viz. lions, tigers, leopards, elephants, rhinoceroses, wild cats, antelopes of several sorts ; many large unsizeable deer, and a creature called a striped ass, which they say can never be tamed, though taken young : it is a beautiful creature, resembling a fine little horse with an ass's tail, and is striped and coloured like a tiger. There is also an amphibious creature, called by them manitee, or a sea-cow, which when alive could weigh no less than twenty-five or thirty hundred weight. She comes up the fresh rivers in the night-time, and then

then gets on shore to graze : she has a large body, a belly hanging low almost to the ground, short thick neck and legs, and seems to be a very unwieldy slow creature : her teeth are large, with huge long tusks, which are counted good ivory. They say the flesh of the young ones makes excellent bacon.

At the hither end of the garden is the slave-house, where all the Company's slaves are lodged and dieted ; their children are taken care of, and taught to write, read, &c. but continue slaves : you may see the Dutch sailors frequently go in and out to the slave-women, which is connived at by the government, and are very acceptable to them who are negroes, and are very proud when their children prove whiter than themselves. There are no Hottentot slaves ; for as ignorant and brutish as those people are, they have a great love for liberty, and an utter aversion to slavery ; neither will they hire themselves in your service longer than from morning to night, for then they will be paid, and sleep freemen, and no hirelings.

Here is a store-house, wherein are kept all sorts of masts, anchors, cables, guns, rigging, &c. to supply their own ships : but should an English ship unfortunately lose a mast, or stand otherwise in need of their assistance, they may perish sooner than be supplied, unless it be by some clandestine method which the government do not allow of, and then pay a most exorbitant price for what they want.

The country all round is very pleasant and fertile, affording great plenty of all sorts of provisions, especially beef and mutton, which are both of a price, viz. about two-pence a pound, though the latter is much better in its kind, and not inferior to ours in England. As for carrots, cabbage, turnips, and falletting, they are not behind hand with us ; which things are very agreeable to our palates, after so long an abstinence from such diet as we were used to in our native country. It abounds also with all manner of fruit, as oranges, lemons, citrons, musk, and water melons ; apples, pears, cherries, pomegranates, grapes, &c. They have lately improved their vineyards, so that they have plenty of red and white muscadello wine, and another pleasant, though smaller white wine. The muscadello is sold from twenty to twenty-four pounds the leaguer, which contains one hundred and sixty gallons, and the other at ten or twelve pounds. The neighbouring vallies are full of herbs (very many being medicinal) and flowers : the rivers and bordering sea afford plenty of fish, as the woods do venison and honey.

Neither is there a lesser plenty of wild fowl, as duck, teal, widgeon, curlew, partridge, pheasant, and many other sorts, as we have in England ; besides, such as are peculiar to those parts, as ostriches, whose eggs are sold very cheap, and are good eating, one being sufficient for two or three men at a meal. Here are great numbers of Canary birds. You may see the sea, especially to the eastward of the Cape, almost covered with a small beautiful speckled fowl, about the bigness of a wood-pigeon, which they call pintado birds, so named, I suppose, by the Portuguese, by reason of their speckled and, as it were, painted feathers. They are very tame, and will swim after you in light winds : and sometimes in the worst of weather, when the ship tries under little or no sail, they will surround it in great numbers, swimming and playing on every wave. The sailors, for their diversion, do often put out hooks, or crooked pins, at the end of a piece of twine, baited with tallow or fat meat, wherewith they catch a vast many of them, but they are of so fishy a taste that they are hardly fit to eat. You shall also see frequently in the bay, as you are at anchor, whales and other great fishes sporting about, particularly great shoals of seals, which will often follow your boat, whose skins are very fine, and I believe the best in the world.

The money that passes here is the same as in Holland, viz. stivers, doublekees, skellings, and rix-dollars. Two stivers make one doublekee, three doublekees one skelling, eight skellings one rix-dollar.—Note: that if you pay away your English crowns or Spanish dollars, they will take them at no more than eight skellings a-piece, which is twenty-five per cent. loss: therefore if you design to touch at the Cape outward-bound, I would advise you to stock yourself with such goods in England as may be proper for that market, to supply your wants, or otherwise you must furnish yourself with Dutch money; though goods, if properly chosen, may produce forty or fifty per cent. profit. Small pale ale in casks of about six pounds per tun, strong beer in bottles, tobacco, butter, cheese, flint-glasses, watches, and other proper sortment of clock-work, with slight scarlet, black, or sky-colour stockings, will turn to as good account as any thing you can carry thither.

Though so many accounts have been given of the Hottentots, or Hotmendods, as our sailors vulgarly call them, by persons of greater capacities than I can pretend to, yet I cannot leave the place without saying something of them: they inhabit the country adjacent to the Cape, being the ancient inhabitants, or aborigines thereof. They are called Hottentots from their frequent repetitions of that word in their dancings; the men are tall, strong set, and very swift runners; having broad flat noses, blubber lips, great heads, disagreeable features, short frizzled hair, and take them altogether nothing can be more ugly. Their skin is like our chimney-sweepers, not that they are naturally so black, but they make themselves so by daubing themselves with foot and stinking grease, which makes them smell most intolerably, and where-with their short curled hair is so clodded and stiff, that I can compare it to nothing better than a frozen mop; they wear no cloaths, but throw a sheep's skin, or the hide of some other beast over their shoulders, the hairy side being turned inward. They cover their privy parts with a case of proportionable length made of the same stuff as the aforesaid mantle, which sticks out in a most unseemly manner. They bruise to pieces the left testicle of their male children when young, for what reason I know not, unless it be in hopes that they may beget more males than females: being perhaps of the opinion of some naturalists, who hold that the male semen comes from the right testicle, and the female from the left. The women are generally short squat creatures, but strong built, altogether as ugly in their kind as the men, having long flabby breasts, odiously dangling down to their waist; which they can toss over their shoulders for their children to suck, whom they generally carry on their backs: they wear the same garb, and cover their privities with a small flap of skin about five or six inches square, tied round their waist with a thong of leather: they besmear themselves as the men do, in order to have their bodies as sweetly perfumed, and their complexion as well painted as they. However they surpass them in one point of dress, for they adorn their legs and arms with raw sheeps' guts, not as much as washed from the ordure, but blown up with wind, and hung to the sun till they are pure dry and stinking. Thence they wear by way of ornament, though if they happen to be hungry they will soon strip them off, and make a hearty meal of them. You may guess that these filthy animals, for they hardly deserve the name of rational creatures, if at London, would be much greater customers to our butchers, kitchen-wenchs, and chimney-sweepers, for their dress, &c. than to the mercers, perfumers, &c. of Ludgate-hill or Covent-garden. There is no carrion so tainted and nauseous but what they will make a dainty meal of; which makes me think that they are born without the benefit of either smell or taste, for they covet not food than what I mentioned before. They are great lovers of tobacco and arrack,

arrack, or any other sort of strong spirits: and what is remarkable, and shews a good temper in them, is, that when one of them has earned two or three doublekees, he fails not to call others of his acquaintance to partake with him, and will surely spend it all before night in tobacco and arrack, sitting down in the streets; where they get drunk, and sleep all night, though the weather be sometimes very cold. They are not really unlike monkeys or baboons in their gestures and postures, especially when they sit sunning themselves, as they often do in great numbers. I could not learn that they have any religion; neither did I see any thing like a priest among them; so that I am apt to believe they are wholly strangers to any manner of divine worship. However, they are very serviceable fellows; they serve in town as porters: neither will they willingly suffer a stranger to carry any burden, but will endeavour to snatch it away in spite of him, and carry it where it ought to be, as one of them did to a sailor of mine, crying, "you Englishman, you ne Hottentot!" so that they look upon themselves to have the privilege of being ticket-porters at the Cape. They are so honest, that you may trust them almost with any thing, and they will carry it safely where directed, though nobody follows, or looks after them. This shews the aspersions to be groundless which some authors (particularly Mr. Morden, in his book of Geography Rectified) cast upon them, saying, that they are such great thieves that they will steal with their feet, while they stare in your face: others affirm, (and particularly Dr. Heylin) that they feed upon human carcases: it is true, their diet is very beastly; but upon inquiry, I never could find that to be true.

Their language is so very harsh and guttural, that I never heard of any European that could pronounce scarce any one word of it; and when they speak, they seem rather to cackle like hens or turkeys, than speak like men. However, those that live near the Cape, do generally speak a little Dutch, and some few words of English, which they pronounce intelligibly enough.

The Dutch do never punish them for any crime, but send the delinquents to their own people, by whom they are punished, for striking or quarrelling with a Dutchman, but more severely if they have offered to steal. By the Dutch laws it is death for a Dutchman to lie with a Hottentot woman; though I think they need not have laid that restriction upon them, the very smell and looks of such hideous creatures being a sufficient antidote against lechery. The arms of war are generally small javelins; but I was informed, that the inland people use the long-bow and arrow very dexterously.

Having completed my affairs here, I sailed away on the 12th of May, for the island of St. Helena, according to the orders I had from the Honourable East-India Company. We had a stout south-east gale which run us the length of Penguin island and then fell calm. This island is small, low and sandy, lying at the entrance of the bay. The inhabitants are only Dutchmen, who, for offences not punishable with death, are banished thither from the Cape for ninety-nine years. And as a farther addition to their misfortunes, they are denied the privilege of any women to live among them: their task is to gather baskets full of shells every day, of which they make lime. Those that are guilty of capital crimes, are punished by racking, impaling on spit or stake, burning and hanging; for the Dutch governor and council have a power of life and death. This island takes its name from a bird so called, which, as I am informed, is an amphibious creature, walks upright like a man when on shore, and has short wings, but cannot fly, his wings being only an assistance to him in running. It lives wholly on fish; there are many hereabout, though I saw but one at a distance swimming in the sea.



We spent fourteen days in very tempestuous weather, which made our passage the longer; but on the ninth of June at five in the evening, we got sight of the island of St. Helena, and about eleven the next day we anchored at Chappel-Valley.

The island of St. Helena is so called, because it was first discovered by the Portuguese on St. Helena's day, being the 20th of April. It lies in the latitude of sixteen degrees south, and longitude from London three hundred and fifty-three degrees forty-three minutes, being about twenty two miles in circumference. When it was first discovered, it had not only no inhabitants, but even not as much as a four-footed beast, fruit, or any eatable herb except wild purslain, with which it abounds: but the Portuguese stored it with goats, hogs, hens, &c. and also with fig, orange, and lemon trees, &c. which have thrived there ever since very well.

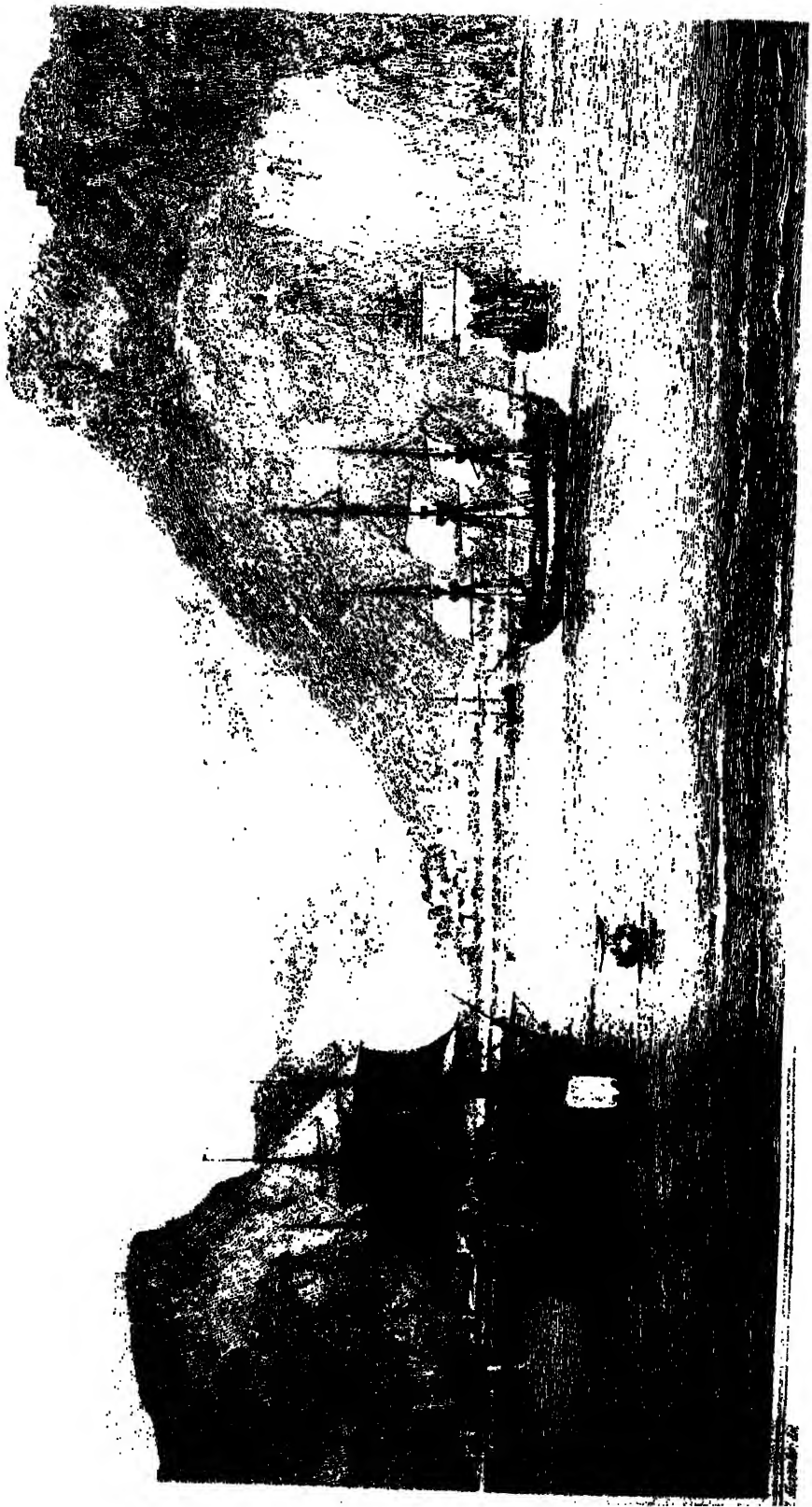
The Spaniards took it from the Portuguese, and afterwards it was alternately possessed by the English and Dutch; till at last the Cape of Good-Hope being quitted to the latter, the English remained sole possessors of this island, though the Cape be preferable by far to it. But he that was chief of the English settlement at the Cape being, as I am informed, bribed by the Dutch, represented to the government of England, that the natives were cannibals, and most terrible cruel creatures, so that it was impossible to hold out against them, (which was utterly false) he had orders to quit it. Whereupon the Dutch settled themselves there, and have kept it ever since in a most flourishing condition.

The air of this island is very wholesome, and recovers very soon those persons that are set on shore there sick, their distemper being generally either a fever, or the scurvy. The inhabitants are all English, except their slaves; whereof they have a great number. The women, even those born there, (as most of them are,) have generally a very fair complexion, notwithstanding the heat of the climate. They all have a great desire to see England, which they call home, though many of them never saw it, nor can have any true idea thereof.

The island is so high, hilly, and of such difficult ascent, that it is a common saying, that a man may chuse whether he will break his heart in going up, or his neck in coming down. It is very strong by nature, because of the steepness of the rocks, and the impossibility of landing, except in those places which have of late been so fortified, that it is in a manner impregnable. We were formerly forced to ascend by a rope ladder, which gave the place the name of ladder-hill; but now the ascent is made much easier by the care of the present governor Pike, especially that part where the ladder was. His whole study is employed for the advantage of the island, and the Company's interest; of which I could give several instances, which I omit, as being foreign to the present purpose.

The country is very pleasant, and affords almost all things necessary for the use of man, as oxen, hogs, goats, and some sheep lately transported thither, whereof the governor takes care to improve the breed; also hens, turkeys, ducks, partridges, pigeons, larks, moor-hens, and a sort of long-legged birds like our wheat-ears, which eat very sweet, but are not so fat as ours. Here is a great variety of sea-fowl; and at certain seasons you may fill your boat with their eggs, which you find on the rocks. They are so tame, that they will suffer you (when they lie on their eggs) to take them up with your hands. But more of this when I come to the island of Ascension. The gardens abound with fruit, as pomegranates, figs, apples, &c. and the valleys with lemons and oranges. It is in vain they say, to sow corn, for there is such a multitude of rats, that they would devour the seed before it would have time to spring up. Here are also a vast number of cats, that went away from the houses,







houses, and became wild, living among the rocks, where they find good prog, feeding on young partridges; and will come sometimes and make great destruction among the poultry, so that they are become as great a plague as the rats; but it is hoped, that by the great encouragement the governor gives, they may both be destroyed in time.

Here is plenty of milk, very good butter, kidney-beans, and yams, whereon the poorer sort of people chiefly live. The yam is a large root that grows in the vallies, in moist ground, bearing a broad leaf; it is very hearty food, and well tasted when thoroughly boiled; but it is not to be eaten raw, for it fetches the skin off your mouth. They have abundance of cabbages, falleting, &c. but few carrots and turnips, through their own neglect. They have no trees of any size, only shrub-wood that bears a sort of gum called benjamin, but in no great quantity: however, it is good sweet firing; but very troublesome to the sailors that cut it, being obliged to ascend one of the highest hills, where there is a very pleasant wood of it; but the trouble of getting it down is still greater. The greatest conveniency of this island for ships is the plenty and goodness of the water.

The chief and only town stands in Chappel-Valley, consisting of about seventy or eighty houses, which are inhabited by the planters, who come down when ships are here; otherwise they generally keep at their plantations up the country, which is more profitable and pleasant to them. And upon a certain alarm given from a high hill when any ships appear, they repair down immediately to their respective posts, to act, if occasion be, for the defence of their country. Here is the only place where ships can ride. It is open to the sea north-westward, but the wind blowing always one way, viz. south-east nearest, and this being the lee-side of the island, you ride there very safely. The fort or castle is pretty well fortified. The governor generally resides there, but sometimes at a pleasant house which he has in the country. They have one church in the town, which makes but a very indifferent figure without, but within is somewhat tolerable. They use great formality in going to church; for about nine o'clock in the morning, the council, the minister, and their wives, together with such commanders of ships as have a mind to it, do wait on the governor in the castle. After which the bell being ordered to ring, a company of soldiers, with a serjeant, in good liveries, are drawn up in the castle, where they make a lane (resting their arms) as a passage to the gate, where there is another serjeant and a company, which march with beat of drum before the governor to the church. After follow the gentlemen and ladies in their respective order. As soon as the soldiers get into the church-yard, they fall off to the right and left, making a lane to the church-door. The governor has a handsome large seat, with books, where he generally desires the commanders of ships to sit, the ladies being seated by themselves.

During our stay here, some of those restless villains, who doubtless had a hand in the aforementioned wicked design at Batavia, were by one of the inhabitants overheard, when drunk on shore, cursing and damning the ship and voyage, laying their heads together, as far as he could understand, for a design of farther mischief; wherefore this person thought fit to acquaint the governor therewith, who, upon strict enquiry, found that a knot of twenty-two of the under officers and sailors had signed a paper in order to stand by one another. They cloked their villainy with a pretext of petitioning the governor for more victuals, which they pretended to be in want of; whereupon the governor and council, having taken the trouble of going on board, and examining the matter strictly, they found no cause for such a complaint, the allowance being seven pounds of good beef for five men a day, with as much rice as they pleased to eat.

This soon convinced them, that their design must be to get a greater stock of provisions on board, and then to take the opportunity of my being ashore, cut her adrift out of the road, and so go a pirating; which might have easily been accomplished.

Here we were a second time delivered from the hellish design of those reprobates. The governor and council, after having strictly and impartially examined the whole matter, ordered the ringleaders to be seized and punished, according to their desert, by whipping at the flag-staff, and then put on board another ship in irons, in order to be brought to England; they not being fit to be trusted among honest men. Many of my sailors, being good, quiet, harmless fellows, were drawn in to sign this paper innocently; for these fellows had persuaded them that in so doing they should have a larger allowance of arrack, &c. This, they confessed, was the only reason why they signed the paper; but what further design the ringleaders had in their heads they were ignorant of.

These troubles detained me here much longer than I had designed; also the ship *Hanover*, Captain Osborne commander, was detained several days on demorage by order of the governor and council to accompany me home, for fear there might be yet some hidden spark of villainy, that might blow up to a fatal consequence, if I were at sea alone: for mutiny is very epidemical on board the merchant ships, where the captain has scarce the power of giving the least correction to his crew, though for never so great faults, without being plagued with suits of law, when he comes home: the sailor's pretended cause being generally undertaken by some common barretor of Wapping, on the condition of no purchase no pay: in which case they never want witnesses enough: for they never fail to take one another's part, and swear tightly, for one another; whereby the captains are often put to great trouble and charges, for want of witnesses to justify his conduct, by a knot of forsworn rogues that hang all together. I cannot but think, that if all the employers of captains were pleased often, or ever, to look into the merits of those matters, and, by diligent enquiry, learn whether such punishment be deservedly inflicted, or not; and if deservedly, that they would take the captain's part, and stand by them, and not suffer them to be torn to pieces; this would contribute much to discourage these rogues, and to overfet their unjust designs; and would be a great encouragement to commanders, and other chief officers, to have a greater authority over their men on board; whereby they might prevent many evil consequences that happen from the want thereof.

On the 7th of July 1715, I received my dispatches from the governor, and sailed away about seven in the evening, in company with the *Hanover*, and steered for England. On the third day following my ship sprung a dangerous leak in the bow. So that we resolved to put into the island of Ascension, which lay in our way, within three or four days sail; and accordingly on the fifteenth we anchored in Ascension road, where we lay only twenty four hours; then having completely stopt, and secured the leak, we set sail, making the best of our way towards England.

This island lies in the latitude of seven degrees fifteen minutes south, and in the longitude of three hundred and forty-five degrees fifty-two minutes. It is a barren place, not inhabited, and seems as if it had been formerly on fire; a great part of the rocks being burnt to a pumice. Here are many wild goats, which are so unaccustomed to fear, that a great flock of them suffered our men to come very near; but having no arms they could not kill any. The island is somewhat larger than *St. Helena*; has more level ground, and seems more capable of being improved, but is not so well watered: some say that in the very dry season there is no fresh water at all, which I can

can scarce believe. When our men landed, they were surprized to see the vast number of large sea-fowl that sat on the rocks ; such as boobees, nodees, men of war, tropick birds, &c. that suffered themselves to be taken off from their eggs ; they sit only upon one egg, and that without any manner of nest, only laid in a hollow part of a rock. The sailors filled their caps and hats with them, while the birds fluttered about them, and followed them, being ready to settle on their heads ; a great number of which they knocked down with their sticks. We spent two or three hours in the pinnace near the rocks, where we caught a prodigious number of various fish ; which were so plenty, that in one hour there were more caught than was sufficient for forty men to eat in a day : but we were often plagued with young sharks, that would run away with our hooks and lines. The water was so clear that we could see the fish take the bait ; and when we saw a shark coming towards it, we made what haste we could to pull up our lines ; yet they were so quick that they would catch the bait sometimes on the very surface of the water. Some of our men that were on the shore fished among the rocks on the sea-side, and caught a great number of large conger eels. Here is also great plenty of oysters, limpets and other shell-fish. There is no place more stored with sea-tortoise. The method of taking them is thus : several persons go ashore in the night, but they must not make the least noise, nor any shew of fire, not so much as a lighted pipe of tobacco ; they must watch the coming of the tortoise ashore, which they do at certain seasons of the year to lay their eggs in the sand, that are hatched by the natural heat of the sun : then they come, and with a boat-hook, or hand-pike, turn the tortoise on the back, which is no easy task ; for if it be not at a pretty distance from the water, she will often scramble away from them, being very strong and heavy to be turned. I have been informed that some were taken here which weighed five or six hundred weight a piece, having a vast many eggs, which are very delicious food. Some of our ship's company went ashore that night, for that purpose ; but the great rain that fell prevented their diversion. We often take a smaller sort at sea, which in calm weather we see sleeping on the surface of the water ; we row up gently in the boat, and take them ere they wake : we took several, which we kept alive on deck without any food for the space of two months.

There is a large cross fixed formerly by the Portuguese on a high hill, which is seen from the road, and serves as a land-mark to know it, there being several other bays before you arrive at it, whereby you may be mistaken ; but if you bring the aforesaid cross to bear south-east, half-south, and the highest peak on the island to bear east-south-east, then the north-east point of the bay will bear north-north-east half-east and you will have ten fathoms water, being as good anchoring as any in the bay. I have been told that letters are often left at this cross in bottles, to secure them from the weather : and that when the Portuguese come, they go up thither, it being but a little way ; and whatever letter they find, they forward it according to directions.

We kept on our way towards England, with fine pleasant weather ; and on the 11th of September, in the latitude of four degrees six minutes north, we met a ship called the Elizabeth of Bristol, which informed us of mighty disturbances in Great Britain, and of a probability of a war with France ; that the late Duke of Ormond, and several others, had left the nation ; that there was great pressing of men, and preparations making for war. The master told us, that he departed from Cape Clear, on the south-west coast of Ireland, about ten days before ; and that it bore off from us west 213 leagues. Considering these matters, and the time of his departure, with the time we should take to get into the Downs ; fearing lest a war might be declared with France before our arrival, we thought proper, for the better security of our ships and cargoes,

cargoes, to make the coast of Ireland, where we might get further intelligence ; and where, in case a war should break out, we might lie for a convoy, or further orders from our masters. Accordingly, on the 24th day we saw Cape Clear, and steered along the shore for Kinfale. There arose suddenly a violent storm at south-west, and south-west by west, that increased so as to force us to bear away before the wind, our rigging and sails being very bad and rotten ; and at four in the afternoon we got safe into Kinfale harbour : the Hanover being a large ship, and much better fitted with sails and rigging, kept the sea, and did not put in with us. On the 29th of October following, we arrived safe in the Downs ; having been two years and fifteen days in my voyage.

# ACCOUNT OF JAVA AND BATAVIA.

FROM THE VOYAGES OF STAVORINUS\*.

CHAP. I. — *Situation of Java. — Straits of Sunda. — Prince's Island. — Dwarfs in den Weg. — Bay of Anjer. — Claim of the Dutch East India Company to the Sovereignty of the Straits of Sunda. — Bay of Bantam. — Road of Batavia. — Kingdom of Bantam. — Tributary to the Company. — Speech made on the Appointment of a Successor to the Throne. — Empire of Jaccatra. — Of Cheribon. — Of the Soe-joeboenam, or Emperor of Java. — Of the Sultan. — Principality of Madura. — Political Conduct of the Company towards the native Princes.*

THE island of Java, which is one of the largest of those constituting the great oriental Archipelago, is situated between six degrees and nine degrees south latitude, and extends from one hundred and twenty degrees to one hundred and thirty-one east longitude from Teneriffe, being one hundred and sixty-five Dutch miles in length. It lies nearly in the direction of east and west. To the south, and to the west, its shores are washed by the southern Indian ocean; to the north-west of it lies the island of Sumatra; to the north, Borneo; to the north-east, Celebes; and to the east that of Bali: from which last it is separated by a narrow passage, called the Straits of Bali. The arm of the sea which runs between Java and Sumatra, is known by the appellation of the Straits of Sunda. The length of this channel is, on the Sumatra side, taken from the Flat Point, to Varkens, or Hog Point, fifteen German miles; and, on the Java side, from the first point, or Java Head, to the point of Bantam, full twenty. In the mouth of the Strait lies Prince's Island, about a league and a half from the coast of Java, and full six leagues from that of Sumatra.

Prince's Island is low, and only about four leagues in circumference. It has, however, two hills, one at its east end, and the other a little more to the south, which make it visible at a moderate distance, especially the hill which lies at the east end, and which is accordingly called the high hill by navigators †.

There is a stone-reef at its south-west side, which, according to the charts, extends a league and a half out to sea, and is dangerous for the ships which pass through the passage between this island and Java. Prince's Island is covered with trees, and affords an agreeable prospect to the passing seamen: it is inhabited by Javanese, who subsist by fishing.

\* A Dutch admiral. Translated by Mr. Wilcocks, who has added valuable notes from various Dutch authors; London, 1798, 3 vols. 8vo.

† The English call it the Pike: in Lieutenant Cook's voyage in the Endeavour, there is a more ample account of this island. Tr.



By the situation of this island, at the entrance of the Straits of Sunda, are formed two passages; the one, running between Prince's Island and Java, has been called the Behouden, or Secured Passage, and is made use of, for the most part, by those ships which have to pass the Straits during the south-east monsoon, in order that, sailing close in with the shore of Java, they may soon get within anchoring-depth, and not be in danger of being driven out to sea again by the currents, which at that time of the year set strongly out of the Straits to the westward.

The other passage, which is called by seamen, Het Groote Gat, or the Great Channel, sometimes serves also as an entrance to the Straits, during the south-east monsoon; but it is with the greatest difficulty, and after a continued struggling with the south-easterly winds, and the currents, that this can be effected; and it is not an unfrequent circumstance that five or six weeks are spent, in working up a distance, which, in the west monsoon, is often sailed over, in twice as many hours.

The East India Company's ship, Luxemburg, Captain Roem, affords an instance hereof: she sailed on the 2d of June 1768, from the bay of Punto Gallo, and came in sight of the Flat Point of Sumatra, at the entrance of the Straits, on the 24th of July, but could not get upon the anchoring-ground, under the shore of Java, till the 21st of November. It was, however, remarkable, that the ship Torenvliet, which sailed in company with the Luxemburg from Punto Gallo, reached Batavia full three months before her; and hence appears how much sometimes one ship is either a better sailer or has better fortune than another, though seamanship and knowledge be upon an equal footing.

Notwithstanding the difficulty of entering the straits on this side, when these contrary winds and currents are in force, yet almost all the ships which fall to leeward, upon the west coast of Sumatra, as well as those which come from Surat, Malabar, Ceylon, Coromandel, Bengal, or other places in the west of India, are obliged to pass through this channel, as it is scarcely possible for them to reach the windward shore of Java, in the teeth of the south-east monsoon, and they therefore cannot avail of the other passage. That this, however, is not wholly impracticable, appeared by the ships the Young Lieven and the Asia, who in the month of June 1770 effected it; yet such cases are extremely rare.

The entrance of the straits, on this side, affords an uncommonly pleasing prospect, near the Sumatran shore. First, the Flat Point, which is low, and covered with trees, and behind it the majestic mountains of Sumatra, rising with a gradual ascent, and reaching to the clouds; a little more forward, the Keizers, or Emperor's Island, lifts its high and spiry summit; farther on, the islands Kraketau, Slybzec, and Pulo Bicie, or the Iron Island, shew their mountains covered with ever-verdant woods. The opposite coast of Java is not inferior to this, and improves continually in appearance, as you pass along it, affording at the same time good anchorage, which is not to be met with on the Sumatra side. The numerous groves of cocoa-nut-palms, and the rice-fields in the back ground, give the most pleasing ideas of the fertility of the soil.

Twelve or thirteen leagues from Prince's Island, in the narrowest part of the strait, and opposite to Varkens, or Hog Point of Sumatra, lies an island that, on account of its situation, exactly in the middle of the channel, has, with great propriety, obtained the name of Dwars in den Weg, Thwart the Way, or Middle Isle. It is low, and of little extent, with some small reefs, which stretch out from it here and there. Like all the islands in these seas, it is covered with wood, and, as far as I know, it is uninhabited.

A strong

A strong current runs through the passages on either side of this island during the whole year, setting, with the prevailing easterly or westerly winds, either to the north-east or to the south-west, although it sometimes happens that the current runs contrary to the direction of the wind, for a short time. Between Dwars in den Weg and the coast of Java, and farther on to the point of Bantam, there appears to be a settled current, independent of the wind; at least I found when, in the month of June, coming from Bengal with the ship *Cornelia Hillegonda*, I lay at anchor, for a day and a half, in the bay of Anjer, over against Dwars in den Weg, that the current changed its course to a contrary direction, twice in four-and-twenty hours; that, however, which flowed towards the straits was full as strong again as that which set the opposite way: the south-east monsoon was then at its height. I experienced the same thing in the month of November of the same year, with the ship *Huis ter Mye*, though it was then in the latter end of the monsoon.

Ships passing out through the straits of Sunda often anchor in the bay of Anjer, in order to take in their last supply of fresh water, from a rivulet which runs from the mountains into the sea at this place, close to a little grove of cocoa-nut trees. There is likewise a Javanese village, which is under the jurisdiction of the King of Bantam, and which has erroneously been reckoned by some travellers, among the large cities of Java, though it has nothing that can be construed into a town.

Not far from this place there is an islet or rock, entirely overgrown with brushwood, which is called the *Brabandsch-hoedje*; and a little farther to the north a similar one, called the *Toppers-hoedje* \*; this last is steep and bold, having fifty fathoms depth close to it.

The Dutch East India Company claim an absolute sovereignty over the straits of Sunda, and this is acknowledged by all the other powers. The Company require the salute, and have the right of interdicting this passage to all other nations, though they do not put their right in force†. This right is maintained as proceeding from the circumstance, that the land on both sides of the straits is tributary to the Company; viz. the kingdom of Bantam on the Java shore, and on the other side the land of Lampon, with that which lies farther westward, being conquered provinces belonging to Bantam. There is a resolution on this subject of the council of India, and articles are included in the secret orders, which are given to the Company's ships bound to the west of India respecting the salute to be required of the ships of other nations; which order is not to be opened, unless they chance to meet with such.

From Anjer to the point of Bantam the country appears in general with high mountains inland, and a foreland more level. From this point, which is the northernmost extremity of Java, the land declines to the south-east, and makes a deep bay; and in the farthest part of the bight is situate the city of Bantam, of which I have already made some mention, and shall say more respecting it hereafter.

From the point of Pontang, which forms the eastern extremity of the bay of Bantam, as that which we have just mentioned does the western, the land is every where very low; yet there are high mountains inland, among which the Blue Mountain towers above the rest. Although this mountain lies at a great distance, towards the south

\* These small islands are called the Cap and Button, by the English navigators. *Tr.*

† This claim has never been openly made by the Dutch, except indeed their putting sundry questions to all strange ships who pass the straits, as circumstantially related in Cook's voyage in the *Endeavour*, may be construed into such a claim; and it would probably not be allowed by the other nations who trade to India, if insisted upon. *Tr.*

side of the island, and south-east from Batavia, yet it is seen before Bantam. It was formerly, as is related, a volcano, but nothing of this kind is at present perceivable.

The navigation from this place to the road of Batavia, affords the most agreeable prospects, by the numerous small islands, covered with perpetual verdure, which are strewed, as it were along the sea. The anchoring-ground is every where very good, but there are many rocks, which are from ten to eighteen feet under water, and which sometimes occasion much damage to the vessels that do not carefully avoid them. The government of Batavia, however, have caused buoys to be placed upon them, moored by heavy anchors; and upon some of them beacons are erected; but when these are washed away by the currents, the navigator must avoid the rocks, by taking the bearings of the several islands.

The road of Batavia is justly esteemed one of the best in the world, as well with regard to the anchoring-ground, which consists of a soft clay, as with regard to the safety it affords to the ships which anchor in it, and to the number which it can contain. Although the road is open from the north-west to east-north-east and east, yet ships lie as secure and quiet as if they were landlocked, on account of the numerous islands which lie on that side, and break the force of the waves. Ships, therefore, are never obliged to moor stem and stern here; and the current which runs within the islands is not strong, but without them it is very violent.

In the road, nearest to the town, lies a guardship, commonly called the admiral-ship, with an ensign at the top, from which, both in the day and in the night, such signals are made to the other ships in the road as the commanding officer shall think needful. For several years past it has been regulated, that one of the captains of the ships in the road, should keep guard on board this ship, in order that, in case of accident by fire or otherwise, there may be always somebody at hand to give the necessary directions, as the other captains of the vessels generally pass the night in the city. On such occasions, a signal is made from the admiral-ship to give information, in order that the necessary assistance be immediately sent from the shore.

Before I say any thing of Batavia, it will not be improper to relate how far the power of the East India Company extends over the whole island of Java. This is divided into four empires, or kingdoms, which are, either wholly or in part, subject to the dominions of the Company.

The first, to begin from the west, is the kingdom of Bantam; this is governed by its own Kings, with full power of life and death over their subjects, yet they are tributary to the Company, paying a yearly acknowledgment of a hundred, bhars of pepper, or thirty-seven thousand five hundred pounds weight. Beside which there is a strict engagement entered into by the King, not to sell any pepper, or any thing else of the produce of his country to other nations. It must all be delivered to the Company, for a certain stipulated price. And this does not solely regard the pepper produced in his dominions in Java, but likewise all that is grown in his other territories, his conquered provinces, situated in the great island of Borneo, and in Sumatra, which likewise yield much pepper; and the Company have accordingly residencies established, in the first at Banjermassing, and in the last at Lampon Toulabouwa, which serve in the same way as Fort Speelwyk does at Bantam, to enforce the fulfilment of the treaties, and to prevent a contraband trade.

The King of Bantam is also deprived of the power of appointing his own successor, and the Company nominate one of the royal family to succeed him, as latterly took place in the year 1767.

The speech made on that occasion by Mr. Offenberg, ordinary counsellor of India, who

who was deputed thither from Batavia, to represent the united Dutch East India Company, as lord paramount, appeared to me, from its peculiarity, well worthy of being literally inserted in this place, as translated out of the Malay, which was the language in which it was delivered, as follows :

“ His Excellency the Governor-general and the Honourable the Council of India, having thought fit and resolved to appoint me as their commissary plenipotentiary to the court of Bantam, in order, at the request of the King, to propose and appoint His Majesty's eldest son Pangorang (Prince) Gusti, as hereditary Prince, and successor to the empire of Bantam ; and this desirable period being now arrived, in consequence I, the commissary aforesaid, in the name and behalf of the general East India Company of the Netherlands, appoint the said Pangorang to be Pangorang Rattoo, or hereditary Prince, and heir to the crown and the whole empire of Bantam, by the title of Abul Mofagir Mohamed Ali Joudeen.

“ The commissary expects that the said Pangorang Rattoo will, at all times, consider this his important promotion as a peculiar favour, and a great benefit conferred upon him by the Honourable Company, being adopted from this moment as the grandson of the East India Company of the Netherlands ; and that he will henceforward, on all occasions and in all times, behave with integrity and gratitude towards them, obeying the commands of the Honourable Company, and of the King his father, during his whole life.”

After the appointment this harangue was again read, by order of the commissary, in the Malay language, in the presence of the King his father, of all the grandees of his court, and a number of the Company's servants, who had come from Batavia, and belonged to the retinue of the commissary ; and the ceremony concluded with the playing of gongoms and other demonstrations of joy.

The second empire in Java is that of Jaccatra, which is bounded to the east by that of Cheribon, and to the west by the kingdom of Bantam. Jaccatra was formerly governed by its own Kings, but the last of these, having been subdued by the arms of the Company in the year 1619, they have ever since possessed it, by the right of conquest, as sovereigns. It is under the immediate government of the governor general and the council of India, and all the Javanese of Jaccatra are therefore born the Company's subjects. Before this revolution Jaccatra was the capital of the empire, but Batavia, which is built very near the former, is now the chief place.

The third empire is that of Cheribon. This is at present under the dominion of three different Princes, who are independent of the Company, and sovereigns in their respective districts. Yet they are their allies, and, in the same manner as the King of Bantam, they are bound, by treaty, to sell all the produce of their territories exclusively to the Company, and not to permit any other nation than the Dutch to enter their dominions ; for the due maintenance of which conditions the Company likewise take care to guard and garrison their sea-ports.

These Princes would be the only ones in Java who possessed not only nominal, but also real sovereignty, were it not for the situation of their dominions, which lie between Jaccatra and the empire of the Soefoehoenam, or Emperor of Java, who is also a dependent on the Company, of whom they must of course stand in awe, and whose wishes they must in every respect observe ; for if they do not, the Company make no scruple of dethroning one Prince, and establishing another in his stead.

The Company exercised their power in this respect, in the commencement of the year 1769. One of these Cheribon Princes, not treating his subjects well, was put under arrest, by orders from the council of India, and banished to the castle Victoria in the island of Amboyna ; while another Prince of the Blood was elevated to the vacant dignity.

dignity, upon the condition, however, of his furnishing a certain annual sum of money for the support of his imprisoned predecessor.

The fourth empire is that of the Soefoehoenam, or Emperor of Java, which is often called Soefoehoenam Mataram, from the place of his residence. This empire comprehended of old the greatest part of the island : that of Cheribon once formed part of it, and it was then very powerful, but, since our nation has been established here, it has lost much of its lustre and importance. Yet it remained undivided till about the middle of the present century, when the Emperor, found himself so much embarrassed, in consequence of the rebellion of Manko Boeni, a Prince of the Blood, that he made a cession of his territories to the Company, who, in return, granted him the half back again as their vassal, and promised him their protection, engaging at the same time never to make any one Emperor of Java who was not a Prince of the Imperial family.

The empire being thus split into two parts, the other half was, in the same manner, given to Manko Boeni, as the Company's vassal, under the title of Sultan, with the like promise of protection, and the like engagement, never to nominate any other than Princes of his family, as successors to his dignity. This other half, therefore, constitutes the fifth empire of Java.

To these may be added a sixth, though it does not properly belong to Java, being a separate island, but close to it. I mean the island and principality of Madura, which is divided from Java by a narrow strait. It is under the government of a Prince, who is equally a vassal of the Company, who, on this account, also dispose respecting the succession.

All these Princes are under engagements (as has already been noticed with respect to Bantam and to Cheribon) to deliver the produce of their respective countries to the Company alone, and not to sell any of it to any other nation ; likewise, not to enter into any connections or treaties with other powers ; and great care is taken to enforce these conditions by the Company, whose numerous forts and garrisons along the whole north coast of Java, render the contravention of them extremely difficult, if not wholly impossible, to the native Princes.

Were they, however, all to unite against the Company, the latter would be in a very disagreeable predicament ; but their mutual and unceasing jealousies and animosities are safeguards against this. Though the Company's government do not perhaps foment, yet they do not extinguish the flames of discord ; which being always kept smouldering, make one native Prince prevent whatever another may design against the Company, by giving them immediate advice thereof.

It was likewise for very solid political reasons, that the empire of Java was allowed, or rather contrived, to be divided into two states ; for such an extent of territory as it formerly comprehended, would always have made whoever was its sole master a dangerous neighbour to the Company, whereas being now under the dominion of two different men, who are likewise irreconcilable enemies, it is easily kept in entire subjection.

CHAP. II. — *Situation of Java. — Climate. — Land and Sea Winds. — Monsoons. — Thunderstorms. — Rivers. — Productions. — Pepper. — Rice. — Sugar. — Coffee. — Cotton Yarn. — Salt. — Indigo. — Timber. — Fruits. — Vast Variety of them. — The Natives. — Their Character. — Dress. — Customs. — Dwellings. — Food. — Diversions. — Religion. — Physicians. — Agriculture.*

JAVA is situated, as we have before observed, to the south of the equator, in a climate, which was thought uninhabitable by the ancients, on account of the scorching heat,

heat, which they believed rendered the land there so arid and barren as to be unable to produce any thing for the subsistence of man. This opinion originated from their total ignorance respecting the interior parts of Africa which lie between the tropics, as well as respecting the Indies, and the great peninsula beyond the Ganges. The improvements of navigation, in modern times, have exploded this error, and proved that the lands near the equinoctial, far from being infertile and uninhabited, on the contrary, yield the palm in nothing to less torrid regions, and are able to feed full as many inhabitants as the most fertile country in the temperate climates, provided the land be but properly cultivated.

The idea that the heat must be utterly insupportable in these parts is not so absurd, for the sun is twice a year vertically over them, and its rays shoot almost always in a perpendicular line; so that it would for certain be nearly as bad as was supposed, if nature herself did not come to their assistance, by the refreshing land and sea-breezes which blow here alternately throughout the year, and so far moderate the heat as to make it bearable by most men. As the rising and setting of the sun is likewise always nearly at the same hour, and scarcely differing more than a few minutes, the long nights consequently cool the air so much, that in the morning for an hour or two before day-break, it may be rather said to be cold than warm, especially for such people as have resided here for some time.

From the month of July to November, which was the time of my last stay at Batavia, the thermometer of Fahrenheit was always, in the hottest part of the day, between eighty-four and ninety degrees, excepting only one day when it rose to ninety-two degrees; and in the greatest degree of coolness in the morning, it was seldom lower than seventy-six degrees. This thermometer was placed in the open air, in the city, shaded both from the rays of the sun, and from their reflection.

The barometer undergoes little or no variation, and stands for a whole year at twenty-nine inches ten lines, as I was informed by the Rev. Mr. Mohr, who made daily annotations thereof.

The warmth of the air decreases greatly, on approaching the mountains, which lie towards the southern parts of the island. Credible people have assured me, that at the country seat of the governor general, which is called Buitenzorg, (rural care), and is situated full sixteen Dutch miles south from Batavia, at the foot of the Blue Mountains, the cold is so great in the morning, that not only thick clothes are requisite, but it is difficult to become warm even with them\*.

The land and sea-winds, of which mention has already been made, blow here every day, without exception. The sea-breeze, which in the east monsoon is generally confined between east-north-east and north, but in the west monsoon runs as far as north-west, and farther, begins to blow about eleven or twelve o'clock in the forenoon. It increases in the afternoon by degrees, till the evening, and then dies gradually away, till about eight or nine o'clock it is perfectly calm. The land wind then begins at midnight, or just before, and continues till an hour or two after sunrise, when it generally again falls calm, till the sea-breeze comes on at its accustomed hour.

\* Dr. Thunberg, who visited both Buitenzorg and the Blue Mountains, says, that the climate there was very healthy and refreshing, and the air, especially in the morning and evening, not only cool, but absolutely cold, insomuch that, not having brought a great coat with him, he was "chilled, and perfectly shivered with the cold evening air, in a country that lies almost directly under the equator." *Tr.*

The year is divided into two seasons, one of which is called the east monsoon \*, or dry season, and the other the west monsoon, or rainy season.

The east, or good monsoon (*goede mousson*), commences in the months of April and May, and ends in the latter end of September, or the beginning of October. The tradewinds then blow, about four or five leagues off shore, and through the whole of the Indian seas, to the south of the line, from the south-east and east-south-east, at times, however, running as far as south-south-east, with fine dry weather, and a clear sky.

The west, or bad monsoon (*kwaade mousson*), generally begins in the latter end of November, or the beginning of December. The wind then often blows with great violence, and is accompanied by heavy torrents of rain, which render this season very unhealthy, and a time of the greatest mortality. The same winds are likewise found to prevail every where to the south of the line. They continue to the latter end of February, or the beginning of March, and then are very variable, till April; in which month, as I was informed, the easterly winds begin to blow: hence these months, as likewise October and part of November, are called the shifting months; and these times of the breaking up of the monsoons, are esteemed at Batavia, the most unhealthy of all.

It is very remarkable, that when the westerly winds blow as far as nine or ten degrees to the south of the line, the contrary takes place, at the same time, and to the same distance, to the north of it; and *vice versa*, when the westerly winds prevail to the north, the easterly winds blow to the south of the line; which alternation is greatly helpful to the navigation westward of Java.

For some years past, it has been observed at Batavia, that the commencement of the monsoons begins to be very uncertain, so that, neither their beginning, nor their end, can be depended upon, with so much certainty as formerly; the cause of which has not hitherto been discovered.

Thunder-storms are very frequent at Batavia, especially towards the conclusion of the monsoons, when they occur almost every evening. They however, mostly pass away without doing any damage. I have noticed in my journal the only two times, during my residence there, that they did any; the one in the month of August, 1769, when I was at the island Onrust, where the lightning fell upon the powder-magazine, wholly destroying the tiled roof, while it fortunately happened, that there was no powder, at that time, in the magazine; the other, when it struck the ship, the Admiral de Ruiter, in October, 1770; both which accidents were however unaccompanied by the destruction of any person.

To the best of my knowledge, there are no large rivers in Java, navigable by vessels of even a moderate burden, but there are many small ones, which flowing down from the mountains, in a northerly direction, run into the sea, all along the north coast; they are however, mostly choaked up at the mouth, by sands, or mud-banks, which render their entrances, at low water, very difficult to the smallest vessels.

On the bank, or bar, before Batavia, the flood rises about six feet, though at spring-tides, as every where, it is more. High and low water, likewise, only occur once in four-and-twenty hours.

\* The word monsoon, (in Dutch, *mousson*), is derived from *moussim*, which, in the Malay language, signifies season. See Valentyn, *Beschryving van Oost-Indië*, vol. ii. p. 136.

Mr. Marsden, in his history of Sumatra, page 13, says, that the word *mooosseem*, of which the term monsoon appears to be a corruption, signifies a year, both in Arabic, and in Malay. Tr.



The productions which the island yields, are considerable, and of great importance to the company : more particularly for the last thirty years, in which period the cultivation of coffee, and other articles, has been assiduously prosecuted and encouraged.

The chief produce is pepper, which is mostly grown in the western part of the island. This spice is produced from a plant \* of the vine kind, which twines its tendrils round poles, or trees, like ivy or hops. The pepper corns grow in bunches, close to each other. They are first green, but afterwards turn black. When dried, they are first separated from the dust, and partly from the outward membranous coat, by means of a kind of winnow, called a harp, and then laid up in warehouses. This winnow or harp is an oblong frame, with a bottom of iron wire closely twisted, so that the pepper-corns cannot pass through it ; this is set sloping, and the ungarded pepper rolling along it frees itself from most of its impurities.

The empire of Bantam, with its dependencies at Lampon; yields annually to the Company more than six millions of pounds of this spice. This pepper is esteemed the next best to that which comes from the coast of Malabar. That from Palembang, of which likewise a very considerable quantity is delivered to the Company, as well as that of Borneo, is of a much inferior quality †.

The price for which the King of Bantam is obliged to sell all the pepper, produced in his dominions, is fixed at six rix-dollars, or fourteen gilders and eight stivers per picol, of one hundred and twenty-five pounds ‡.

It has been the opinion of many, that the white pepper is the fruit of a plant, distinct from that which produces the black ; this, however, is not the case ; they are both the same production ; but the white is manufactured, by being laid in lime, which takes off its outer coat, and renders it whitish. This is done before the pepper is perfectly dry.

Rice § is the second product of Java, and is collected in large quantities, especially in the empire of Java Proper. It grows chiefly in low, fenny ground. After it has been sown, and has shot up about two or three hand breadths, above the ground, it is transplanted by little bundles, of six or more plants, in rows ; then by the damming up of the many rivulets, which abound in this country, the rice is inundated, in the rainy season, and kept under water, till the stalks have attained sufficient strength ; when the land is drained, by opening the dams, and it is soon dried by the great heat of the sun.

At the time of the rice harvest the fields have much the same appearance as our wheat and barley-fields, and afford an equally rich scene of golden uniformity.

The sickle is not used in reaping the rice, but instead of it a small knife, with which the stalk is cut, about a foot under the ear ; this is done, one by one, and they are then bound into sheaves, the tenth of which is the reward of the mower.

The paddee, which is the name given to the rice, whilst in the husk ||, does not grow, like wheat and barley, in compact ears, but like oats, in loose spikes. It is not

\* *Piper nigrum*.

† See the exact quantities of the imports of pepper at Batavia, for one year, from all these places, in book iv, chap. 1 of Mr. Stavorinus's second voyage. Tr.

‡ Equal to about twenty-two shillings sterling per hundred weight English, or nearly twopence half-penny per pound. Tr.

§ *Oryza sativa*.

|| The following, besides many others, are names applied to rice, in its different stages of growth and preparation ; paddee, original name of the seed : oossay, grain of last season ; bunnec, the rice-plants before transplantation ; brals, or bray, rice stripped of its husk ; charroop, rice cleaned for boiling ; nassce, boiled rice. &c. Tr.

threshed, to separate it from the husk, but stamped in large wooden blocks, hollowed out; and the more it is stamped the whiter it becomes when boiled. The native Indians, throughout the east, use this grain as bread, and as their principal food.

Java has been called the granary of the east, on account of the immense quantity of rice which it produces. The other islands in this neighbourhood, yield little or none, except Celebes, where enough is grown to provide likewise Amboyna with this staff of life.

In the year 1767, the quantity of seven thousand lasts, or thirty-one millions of pounds of rice \* was required, and furnished, for the consumption of Batavia, Ceylon, and Banda, from the island of Java.

Sugar is likewise an article, which is produced in large quantities in Java, and brought to Batavia. The quantity of thirteen millions of pounds, manufactured in the year 1768 in the province of Jaccatra alone, is sufficient to shew with what luxuriance the sugar-cane † flourishes here. Much of it is exported to the west of India, to Surat and the coast of Malabar, and the rest to Europe. Most of the sugar-mills are kept and worked by Chinese.

A fourth production of the island is coffee. The plantations of it are, however, peculiarly confined to the provinces of Cheribon and Jaccatra. The tree ‡ which produces this berry was first introduced into Java in 1722, or 1723, under the government of the governor general Zwaardkroon, who greatly encouraged the cultivation of it among the Javanese. It is at present so much multiplied, that in the year 1768, Jaccatra furnished four millions four hundred and sixty-five thousand five hundred pounds weight to the Company, who paid no more, according to the best of my knowledge, than three rix-dollars and a half, or eight gilders eight stivers per picol, of a hundred and twenty-five pounds §.

Cotton-yarn is likewise an important object of trade, which Java furnishes to the Company. It is spun by the Javanese, from the cotton which is produced in great plenty in the interior parts. The province of Jaccatra yielded, in 1768, no more than one hundred and thirty-three picols, or sixteen thousand two hundred and twenty-five pounds, which was one thousand eight hundred and seventy-five pounds less than ought to have been delivered by the Indians, according to the quota imposed upon them; but this deficiency was occasioned by a season of uncommon drought, by which the cotton-crop had been materially injured.

Salt, much of which is brought from Rembang to Batavia, is equally an article of trade for the Company, who dispose of it for a handsome profit at Sumatra's west coast.

Another product of the country is indigo, which is mostly shipped to Europe. The culture of the plant which produces this dye || is prosecuted with vigour in the province of Jaccatra. In the year 1768, the natives were assessed at six thousand one hundred and twenty-five pounds, though they only furnished two thousand eight hundred and seventy-five pounds.

\* Fourteen thousand tons, or two hundred and eighty thousand cwt. Tr.

† Saccharum officinarum. ‡ Coffea.

§ Mr. Stavorinus corrects this statement, with respect to the price, in his second voyage, where he informs us, that the rate at which the Company paid for the coffee was four rix-dollars per picol, being equal to about fourteen shillings and five pence sterling per cwt; but other accounts make this article stand them in the same proportion as the pepper, two pence halfpenny per pound, or about one pound two shillings per cwt. the first is probably what is paid to the cultivator's and the last the invoice-value, being with the addition of the charges. Tr.

|| Indigofera tinctoria.

Large quantities of heavy timber are also brought from the north-east coast of Java, to Batavia. This is not, in reality, a branch of trade for the company; but it is of great importance for ship building, and other purposes\*.

From all this, the great importance of this island to the company, is very apparent. It produces some of their most considerable articles of commerce, and provides the greatest part of their Indian possessions with food, not to say any thing of the last mentioned advantage, of furnishing materials for ship building.

The island is extremely abundant in fruit-bearing trees. In the first place, there is the cocoa-nut-palm †, which is well known. The furi-tree, which yields the palm-wine, or toddy. China-oranges ‡, of which there are two sorts, one of a large, and the other of a smaller size. The tamarind-tree §, whose fruit consists in pods, containing the tamarind, a spongy substance, in which the beans or stones are inclosed. The pompelmoes, or shaddock ||, the fruit of which is one of the most wholesome, on account of its refreshing quality and taste.

Next the durioon, or drioon-tree ¶, the fruit of which is inclosed in a hard shell, of the size of a man's head, and sometimes larger; it has a most disagreeable smell, which is extremely offensive to those who have never eat of it; when once, however, the fruit is tasted, the loathing which its odour is apt to excite, is quickly overcome, and use makes it, in the end, so familiar, that it is generally preferred beyond all other fruits. It is a strong stimulative, and is therefore much prized by the Chinese. The fursak-tree \*\*, has a fruit of a similar kind with the durioon, but it is not accompanied by such a fetid smell.

The mango-tree ††, deserves equally to be noticed; its fruit, when ripe, has a thin, oblong shape, and is about the size of a goose's egg. Its coat is not thick, of a yellow colour, and soft. When peeled, it has a fleshy substance. Within, it is of an orange colour, like a melon, with which its flavour has likewise some analogy; but if the mango be a good one, it is much more delicious. In the centre, is a large kernel. When green, it is made into attjar ††; for this, the kernel is taken out, and the space filled

\* See the more ample account given of the articles of trade of Java, in book iv. chap. 1. of Mr. Staverinus's second voyage. Tr.

† *Cocos nucifera*.

‡ *Citrus aurantium*.

§ *Tamarindus indica*.

|| *Citrus decumanus*; the shaddock is a large lemon, of the size of a child's head; the juice is moderate- acid, and quenches thirst; it is cooling, antiseptic and antiscorbutic. Tr.

¶ The botanical rank of the durioon though it is particularly noticed in Cook's voyage in the Endeavour, as well as by Dr. Thunburg, seems not to have been yet ascertained; the following account of the tree which produces it, from Marsden, may perhaps be helpful to the botanist: "The tree is large and lofty; the leaves are small in proportion, but in themselves long and pointed. The blossoms grow in clusters, on the stem and larger branches. The petals are five, of a yellowish white, surrounding five bunches of stamens, each bunch containing about twelve, and each stamen having four antheræ. The pointal is knobbed at top. When the stamens and petals fall the empalement resembles a fungus, and is near the shape of a Scotch bonnet. The fruit is not unlike the bread fruit, but larger and rougher on the outside." It has by some been confounded with the bread fruit. Dr. Thunburg says, it is considered as diuretic, and sudorific, and serviceable in expelling wind. Tr.

\*\* This seems to be the nanca, or jakes of Cooke, and the boa nanca (*radermachia*) of Thunburg; or what is commonly called the jack, by the English; at Batavia, it is generally of the size of a large melon: its smell somewhat resembles that of mellow apples, mixed with garlic: the outer coat is covered with angular prickles, and contains a number of seeds, or kernels (which, when roasted, eat like chestnuts) inclosed in a fleshy substance, of a rich, but to strangers, too strong a flavour, but which gains upon the taste. Tr.

†† *Mangifera indica*.

‡‡ Articles preserved in vinegar, with pepper and other spices, are called attjar; besides mangoes, the rind of melons, cucumbers, and in particular the aromatic roots of the bamboo tree, with various other roots, fruits and vegetables, are made into attjar. Tr.

up with ginger, pimento, and other spicy ingredients, after which it is pickled in vinegar, and is sent to all parts, as presents, or otherwise.

The mango-tanges, or mangosteen \*, is esteemed the most delicious fruit that is produced in the Indies. It is generally of the size of an apple, and resembles a pomegranate in appearance, only it is larger and thicker, and its coat is not so tough. The fruit, when stripped of the outward rind, appears like a little apple of a snow-white hue, composed of six or seven lobes, of the size of a joint of a finger, having a black stone in the inside; they are very soft and juicy, and their flavour is so delightfully refreshing that it is indescribable. The taste seemed to me to approach the nearest to that of the peach, but it is rather more mellow to the taste. The tree which produces it is about the size of a common plum-tree. I met with people who assured me, they had been cured of a dysentery of long standing, by eating large quantities of this fruit; though others were of opinion that it produced a contrary effect. The rind has a strong astringent power, and might perhaps be used as a dye, for a fine deep red colour †.

Lemon ‡ and lime-trees are here likewise in great plenty. There is also a certain fruit called katappa §, which is like our walnuts, but better tasted. It grows upon a high tree, which affords an agreeable shade, and is inclosed in a green husk in which it lies in rolls, and is as white as milk.

Pineapples || are produced in large quantities, and are therefore little esteemed at Batavia; they are generally sold for the value of a stiver (penny) a piece, and sometimes for less.

Besides these, there are many other kinds of fruit produced upon the island, which are too numerous for me to mention here ¶.

The

\* *Garcinia mangostea*.

† The Chinese use the rind of the mangosteen for dyeing black. TR.

‡ *Citrus medica*.

§ *Terminalia catappa*.

|| *Bromelia ananas*.

¶ The fruits most worthy of remark, besides the above, are the following: the pisang, or bananas (*Musa paradisiaca*) of which there are several sorts, the best, pisang radja, is a delicious and wholesome fruit, with a thin coat, and an inner pulpy part, which is sweetish, and somewhat mealy; it is eaten both raw, and dressed in various ways. The jamboo (*Eugenia malaccensis*), which is of a deep red colour, and oval shape; the largest are not bigger than a small apple; it is pleasant and cooling, though it has not much flavour. The jamboo eyer-mauer (*Eugenia jambos*), which both smells and tastes like conserve of roses. The papaya (*Carica papaya*), which is as large as a small melon, and the yellow pulp within, has nearly the same taste. The sweetlop (*Annona squamosa*), which consists of a mass of large kernels, from which the surrounding pulp, which is very sweet, and of a mealy nature, is sucked. The custard-apple (*Annona reticulata*), which derives its English name from the likeness which its white and rich pulp bears to a custard. The rambutan (*Nephelium lappaceum*), which grows in large clusters, and very much resembles a chestnut, with the husk on; the eatable part is small in quantity, but its acid is rich and pleasant, and perhaps more agreeable than any other in the whole vegetable kingdom. The bilimbing (*Averrhoa belimb*), the bilimbing bessa (*Averrhoa carambola*), and the cherimelle (*Averrhoa acida*), which are three species of one genus, and though they differ in shape, are nearly the same in taste; the first is oblong, of the thickness of a finger, and so four, that it cannot be eaten alone; the bilimbing bessa, is an egg-like pentagonal fruit, about the size of a pear, and is the least acid of the three; the last is extremely acid, and of a small roundish, irregular shape, growing in clusters close to the branch, and containing each a single seed; they all make excellent pickles, and four sauce. The guava (*Psidium*) which is well known in the West Indies. The Boa bidarra (*Rhamnus jujuba*) which is a round yellow fruit, about the size of a gooseberry; its flavour is like that of an apple, but it has the astringency of a crab. The nam-nam (*Cynometra cauliflora*), which in shape somewhat resembles a kidney; it is about three inches long, and the outside is very rough; it is seldom eaten raw. The suntul (*Trichilia*) which, within a thick skin, contains kernels like those of the mangosteen, but which are both acid and astringent. The madja (*Limoni*) which contains, under a hard brittle shell, a lightly acid pulp, which cannot be eaten without sugar. The salac (*Calamus rotang zalacca*), which is the fruit of a prickly bush, and has a singular appearance, being covered with scales, like those of a lizard; it is nutritious and well tasted, in flavour somewhat resembling a strawberry.

The

The native inhabitants are all commonly called Javanese, whether they belong to the kingdom of Bantam, or to any other part of Java; those of Madura bear the name of their island. They are of a middling size, and in general well-proportioned, of a light brown colour, with a broad forehead, and a flattish nose, which has a small curve downwards at the tip. Their hair is black, and is always kept smooth and shining with cocoa-nut-oil. They are in general proud and lazy, as well as cowardly. Their principal weapon is a kris, which is a kind of dagger, like a small sized *couteau de chasse*, and which they always carry with them. The handle or hilt is made of different materials more or less valuable, according to the wealth or dignity of the wearer. The blade is of well-hardened steel, of a serpentine shape, and thus capable of making a large and wide wound. It is often poisoned, and in that case causes immediate death. Arrogant towards their inferiors, they are no less cringing with respect to their superiors, or whoever from whom they have any favour to expect.

Their dress consists in a piece of cotton, which they wrap round the waist, and drawing it between the legs fasten it behind. They are otherwise naked, except that they wear a small cap on the head. This is the dress of the common people. Those of more consideration wear a wide Moorish coat of flowered cotton, or other stuff, and in general turbands, instead of the little caps. They suffer no hair but that of the head to grow, and eradicate it carefully wherever it appears elsewhere.

The dress of the women is little better than that of the men; it consists in a piece of cotton-cloth, which they call *saron*, and which wrapping round the body, just covers the bosom under which it is fastened, and hangs down to the knees, and sometimes to the ankles; the shoulders and part of the back remain uncovered. The hair of the head, which they wear very long, is turned up and twisted round the head like a fillet, fastened with long bodkins of different sorts of wood, tortoiseshell, silver, or gold, according to the rank or wealth of the lady. This head-dress is called a *condé*, and is also in vogue among the Batavian ladies. It is often likewise adorned with a variety of flowers.

Both men and women are very fond of bathing, especially in the morning. The children of both sexes go entirely naked, till about eight or nine years of age. Twelve or thirteen is their age of puberty.

The Javanese are polygamists; they marry as many wives as they can maintain, and take their female slaves besides for concubines. This, however, of course does not take place with the common people, who must be content with one wife, because they cannot afford to keep more. The women are proportionally more comely than the men, and they are very fond of white men. They are jealous in the extreme, and know how to make an European, with whom they have had a love affair, and who proves inconstant, dearly repent both his incontinence and his fickleness by administering certain drugs to him, by which he is disqualified from the repetition of either. People of the utmost credibility at Batavia, have related to me too many examples of this refinement of female revenge to render the circumstance at all doubtful. •

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The *fokke fokkes* (*solanum melongena*), which is of a purple blue colour, in shape like a pear, and of various sizes; it has an agreeable taste when boiled. Watermelons (*arbuses*), which are in great plenty, and very good. Grapes, melons, pumpkins, pomegranates, and figs, appear to be the only European fruits to be met with at Batavia; though strawberries, and some others are said to thrive in the interior parts of the country. T<sub>a</sub>.

Their dwellings may with greater propriety be called huts than houses. They are constructed of split bamboos, interlaced or matted, plaistered with clay and covered with attap, or the leaves of the cocoa-nut tree. The entrance is low, and is without a door or shutter. The whole house usually consists of but one apartment, in which, husband, wife, children, and sometimes their poultry, of which they keep a great many, pig together on the ground. They always choose a shady place to build in, or plant trees all round. Such as possess more property, are provided with a little more comfort and convenience; but it is always in a wretched paltry manner.

Their chief food is boiled rice with a little fish, and their drink water. They do not, however, reject a little arrack, when they can obtain it. They are almost continually chewing betel, or pinang, and likewise a sort of tobacco produced here, and therefore denominated Java tobacco, which they also smoke through pipes made of reed; they sometimes put opium into their pipes with the tobacco, in order to invigorate their spirits, but the continual use of it rather deadens them; I saw some who had been too immoderate in this indulgence, who sat like statues with open fixed eyes, and speechless.

They have no tables or chairs; but sit upon the ground, or upon mats, with their legs crossed under them. They do not either make use of any knives, forks, or spoons, but eat with their fingers.

They have a certain kind of musical instruments, called gonggoms, consisting in hollow iron bowls, of various sizes and tones, upon which a man strikes with an iron, or wooden stick, which do not make a disagreeable harmony, and are not unlike a set of bells.

They are very fond of cock-fighting, for which they keep a peculiar breed. Though they may be ever so poor, they will sooner dispose of every other part of their property, than sell their game-cocks. They are, besides, obliged to pay a tax to the company for these fowls; and this duty is yearly farmed at Batavia, and forms part of the revenues of the province of Jacatra. In the year 1770, it amounted to four hundred and twenty gilders per month\*; it is, however, only in that province that they are liable to it.

A kind of tennis-play is also a favourite diversion among them, and they are very handy and dexterous at it. They strike the ball with their feet, knees, or elbows, whither they chuse, and receive it back, thus keeping it for some time in continual motion, without its touching the ground: the ball is generally of the size of a man's head, hollow, and made of matted reeds.

Their manner of salutation consists in touching the forehead with the right hand, accompanied by a slight inclination of the body.

The Mahometan religion is predominant over the whole island. It is said, that far inland, over the mountains, towards the south side of the island, there are still some of the aboriginal idolatrous natives to be met with. Mosques, or places of prayer of the Mahomedans, are erected all over the island; there is a very famous one near Cheribon, but I did not see it. They are very particular and nice about the tombs of their saints, and will suffer nothing unbecoming to be done upon or near them; an instance of which has been already related.

They have both male and female physicians, who have been known to effect very surprising cures, by means of their knowledge of the medicinal and vulnerary herbs,

\* About 35*l*. 10*s*. or 426*l*. per annum. T.R.







produced in their country. They have sometimes greater practice among the Europeans at Batavia, than those physicians who have been regularly bred and come over from Europe; yet they have no knowledge whatever of anatomy. The friction of the affected parts is one of their chief means of cure. This is done with two fingers of the right hand, which are pressed down by the left; and passed continually downwards, after having first anointed the part with water mixed with fine ground wood, or with oil.

For the purposes of agriculture, they use buffaloes instead of horses, though there are enough of the last, but of a diminutive size. These buffaloes are very large animals, bigger and heavier than our largest oxen, furnished with great ears, and horns which grow straight forward, and are bent inwards. A hole is bored through the cartilage of the nose, and these huge animals are guided by a cord which is passed through it. They are generally of an ash-grey colour, and have little eyes. They are so accustomed to be conducted three times a-day into the water to cool themselves, that without it they cannot be brought to work. The female gives milk, but it is little valued by the Europeans, on account of its acrimonious nature.

CHAP. III. — *Batavia. — The River of Jaccatra. — The Water-fort. — The Barr at the Mouth of the River. — The Castle. — Buildings in and near it. — Walls of the City. — Gates. — Admiralty-wharf. — Quarter for the Workmen. — Churches. — Houses. — Chinese Houses. — Massacre of the Chinese, in 1740 — Assessment on Rents. — Bank of Batavia. — Suburbs. — The Chinese Campon. — Character of the Chinese. — Their Appearance. — Drefs. — Religion. — Temples. — Divination. — Tombs. — Environs of Batavia. — Roads. — Streets.*

THE city of Batavia, styled by our own and foreign travellers, who have formerly visited it, the queen of the east, on account of the beauty of its buildings, and the immense trade which it carries on, is situated very near the sea, in a fertile plain, in the kingdom of Jaccatra, upon the river of that name, which running through the middle of the town divides it into two parts. To the north of the city is the sea-shore; behind it to the south, the land rises with a gentle and scarcely perceptible acclivity up to the mountains, which lie fifteen or sixteen Dutch miles, or leagues inland; one of these, which is very high, bears the name of the Blue Mountain.

The singular circumstances, which gave rise to the building of this city, are too well known in history, and too circumstantially related by Valentyn, that I should repeat them here. I shall only make mention of such changes, as have taken place in the city, since the time his work was written (1726): at least, in so far as I had opportunity to observe them.

\* The best account in the English language of the foundation and rise of Batavia, is to be found in the Modern History of the East, vol. x. page 304, &c. This is compiled from Valentyn's great work, entitled Oud en Nieuw Oost-Indië, and from other Dutch writers. It was in 1619, that the celebrated general John Pieter van Noort, took the town of Jaccatra, which he in a great measure destroyed, and founded another city, not far from the same spot, but very near it, in which he gave the name of Batavia, though it is said, that the natives wished to have called it New-Horn, from the place of its situation. Batavia is in North Holland, and though an inconsiderable place in point of strength and beauty, is declared to be the capital of the Dutch settlements in India; his choice of the situation was, however, far from contrived, and the place has since, under his care, that Batavia rose with a rapidity and splendour to that magnificent city, which have rendered it both the admiration and the envy of all the more eastern monarchs of the East; and which still dazzle and overwhelm them, although the city has in these last fifty years, lost much of its splendour and population. &c.

The city is an oblong square, the shortest sides facing the north and south, and the longest the east and west.

Through the middle of the city, from south to north, runs as before said the river of Jaccatra, over which there are three bridges, one at the upper end of the town, another at the lower part near the castle, and the third about the middle, being thence called the Middlepoint bridge. Two of these are built of stone. Close by the middlemost, there is a large square redoubt, provided with some pieces of cannon, which command the river, both up and downwards.

The breadth of the river within the city, is about one hundred and sixty or one hundred and eighty feet. It runs into the sea, past the castle and the admiralty-wharf. On both sides of the mouth are long piers of wood and brick-work, about three thousand eight hundred feet in length, taken from the moat of the city. The eastern pier, which was repaired and in a great measure rebuilt a few years ago, cost the Company thirty-six thousand two hundred and eighteen rix-dollars in timber, and thirty-six thousand three hundred and twenty rix-dollars in masonry, making at forty-eight stivers, *f.* 174,091.4. \*; which is, in fact, a large sum, when it be considered that the timber costs the Company but little money, as it is produced in abundance in Java.

The vessels belonging to the free merchants are laid up and repaired between these piers, on the west side; but along the east side, the passage remains open for the lighters which go in and out of the city, with the cargoes of the ships.

At the outward point of the eastern pier there is a shed which serves for a stable for the horses, which draw the small vessels and boats up and down the river.

Opposite to this is a horn-work commonly called the Water-fort, which was built during the government of the governor general Van Imhoff, at an immense expence to the Company; for several large ships were obliged to be sunk on account of the depth of water on the spot, in order to lay a good foundation for building the fort. It is constructed of a kind of coral-rock, and defended by several heavy cannon †. It has barracks within it for the garrison; and there is no other approach to it than along the western pier. It is at present very much out of repair, and the walls begin to sink and fall down in many places.

The objects for which this fort was erected, seem to have been the defence of the road, and of the entrance of the river; yet, in both these respects, it is now of little advantage, for the anchoring-place is now so far removed from this fortification, by the encrease of the mudbank which lies before the river, that, although its guns might reach the ships in the road, little damage could be done on either side, at such a distance ‡; and as to what regards the defence of the river's mouth, that is of very trifling importance; for the daily and continual increase of the bar renders the water much too shallow for large vessels, and an enemy would never seek to effect a landing there, but would always prefer an easy firm sea-beach, such as is to be met with beyond Amjol §.

The

\* About 16,000*l.* sterling. Tr.

† In 1793, when Lord Macartney visited Batavia, this fort had mounted and dismounted fourteen guns and two howitzers. Tr.

‡ Ary Huysers, who wrote an account of the Dutch settlements in India in 1789, and had been at Batavia a few years before, says that, in his time, a trial had been made of the heavy artillery at the mouth of the harbour, and that it was found sufficient to command and protect the whole extent of the road. Tr.

§ At Amjol, and at Tanjongpoura, to the eastward of the city on the sea-coast, there are strong forts, and to the westward at Ankay, Tangorang, and the Kwal. On the landside Batavia is further covered

The above-mentioned bank, or bar, lies directly before the mouth of the river, and extends a great way to the west, and but a little to the east, for which reasons such vessels as are deeply laden must go round by the east side, close along the eastern pier, in order to get within the bar. It is continually increasing towards the road, by which the place where the ships lie is more and more removed from the city. To the westward it is dry in some places.

Right before the mouth of the river, from which the shallowest part of the bank is distant about six hundred or six hundred and fifty feet, there is at low water no more than one, or one and a half foot; so that a common ship's boat cannot get over it, but must also go round its east end. When the sea-breeze blows fresh, it makes a troublesome and cockling sea; and a west or bad monsoon seldom passes without the loss of some vessels upon it.

This shoalness of the water is said to be the consequence of a violent earthquake, which took place in Java in the latter end of the last century, and by which the river of Jaccatra was partly stopped up. Yet the greatest increase of the bank has been since the year 1730; and it is to be apprehended, that the river will in time become wholly unnavigable and useless by it.

The castle or citadel of Batavia, which forms the north boundary of the eastern division of the city is a regular square fortress, with four bastions, which are connected by high curtains, except on the south side, where the curtain was broken down during the government of Baron Van Imhof. The walls and ramparts are built of coral-rock, and are about twenty feet in height. It is surrounded by a wet ditch, over which, on the south side, lies a drawbridge. Between the moat and the buildings within the fort, on this side there is a large area or esplanade. In the centre of the buildings that look towards the city is a great gate, and then a broad passage, with warehouses on each side, leading to another esplanade on the north side, enclosed between the ramparts and the buildings, all of which is appropriated to the use of the Company\*.

The government-house, which forms the left wing of the buildings looking to the south, is provided with numerous and convenient apartments, but is at present uninhabited. In it is a large hall, in which the council of India generally assemble twice a week; this is adorned with the portraits of all the governors general, who have ruled in India, since the establishment of the Company.

Close by is a little church, or chapel, usually called the Castle-church, and a little more forwards is a corps-de-garde, where a party of dragoons always mount guard.

Over the castle-bridge there is a great plain, or square, planted with tamarind-trees, which afford a very agreeable shade. The entrance to it from the city is over a bridge, and through a large and stately gate. This is mounted by a bold cupola, from which an octagon turret rises, containing a large clock, which is the only public one

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covered by the forts at Jaccatra, the watering-place, Rywiek, &c.; though these are merely defences against the natives, and are most of them little better than fortified houses. Tr.

\* Captain Parish's account of this fortress in Macartney's Embassy to China, 1793, is as follows:—"A little above was the castle; a regular square fort, but without ravelins or other out works. It had two guns mounted on each flank, and two or sometimes three on each face; they were not *en barbette*, nor properly *en embraiture*, but in a situation between both, having both their disadvantages, without the advantages of either. The wall was of masonry, about twenty-four feet high. It had no ditch, but a canal surrounded it at some distance. It had no cordon. The length of the exterior side of the work was about seven hundred feet." Some further particulars, both of the town and of the castle, are given in Mr. Stavorinus's second voyage. Tr.

to be met with at Batavia. It was built under the government of Baron Van Imhof, as appears by an inscription over the gateway, and forms no trifling embellishment of the city.

On the left side of the gate is a large building, which serves as a *corps-de-garde*, having in front a long gallery, resting upon a row of pillars. A captain's guard of grenadiers are generally posted here.

On the west side of the square stand the Company's artillery-house, and the dispensary, or provision-magazine, both of which reach behind to the river side, so that the goods are taken in and out of the lighters with the greatest ease. This is an advantage which is possessed by almost all the Company's warehouses and repositories in Batavia.

On the opposite side is the iron magazine, and what is termed the *grafs plat*, being the place of execution for criminals: this is an artificial square eminence, upon which there is a gallows and some posts, behind it is a small building with windows, looking towards the place of execution, whence the counsellors of justice behold the completion of their sentences\*.

There a number of pieces of artillery, both iron and brass, and of all sorts and sizes, together with other warlike implements, ranged upon the plain. Any one may ride through the gate we have just mentioned as far as the drawbridge of the castle, but not over it, unless he have the rank of senior merchant, or higher.

The city is encircled by a wall of coral rock †, defended by twenty-two bastions, or bulwarks, all provided with artillery, and surrounded by a broad moat, in which there is seldom any want of water, that being conveyed into it out of the river.

Batavia has five gates; one at the east side, which is called the Rotterdam gate; two to the south, the New gate, and the Diest gate; one to the west, the Utrecht gate; and one on the north side, to the west of the river, called the Square gate.

Near to the last-mentioned gate, and opposite to the castle, is the admiralty wharf; and not far off, the warehouses for naval stores, as likewise the workshops of the carpenters, coopers, sail-makers, and smiths, with other offices that relate to the shipping. Here are also the houses of the commandants, and comptrollers of equipment, who were formerly obliged to reside upon the wharf; but for some years past this regulation has not been observed, and they now live in other and more pleasant parts of the town.

In the south-east corner of the city, close to the ramparts, lies what is called the *Ambagtskwartier*, or the workmen's quarter, in which all the mechanics and labourers who are employed by the Company in their buildings, have their abode. The journey-men work here under masters of their respective trades, carpenters, smiths, plumbers, braziers, masons, and others, who are all accountable to the chief of the quarter, who is called *fabrick*, or head workman, and has generally the rank of merchant. Besides a great number of Europeans who are employed here there are ~~fully~~ a thousand slaves who belong to this quarter, by which the Company incurs an enormous expence, with little benefit from their labour, which generally turns to the advantage of individual members of the government.

\* It is customary throughout Holland, and its dependencies, for the magistrates, or judges, who have passed sentence upon criminals, to preside at the execution of it. This is in Europe generally done upon some open place before their town-halls, from the windows of which the magistrates, dressed in their robes of ceremony, behold the execution. Tr.

† Sir George Staunton says, that part of the town-wall is constructed of lava, which is of a dark blue colour, of a very hard, dense texture, emits a metallic sound, and resembles very much some of the lava of Vesuvius. Tr.



There are three churches for the reformed religion within the city, in which service is performed in the Dutch, Portuguese, and Malay languages, and one without the gates, which is called the outer Portuguese church. Besides these, there is a Lutheran church, which was built during the government of Baron Van Imhof, not far from the castle; this last is provided with a fine organ, and a very handsome pulpit.

The town-hall and other public buildings are circumstantially described by Valentyn, and I shall not, therefore, make further mention of them.

The houses at Batavia are mostly of brick, run up in a light and airy manner, and stuccoed on the outside, with fast windows. Within they are almost all built upon a similar plan, the fronts being in general narrow, though there are a few that are more extended.

On entering the door there is a narrow passage, and on one side a parlour; then you come into a large and long room, that receives its light from an inner court, which trenches upon this apartment, and renders its form irregular. This is called the gallery, and is the place where the family usually live and dine. The floors are of large, square, dark red stones. No hangings are to be seen, but the walls are neatly stuccoed and whitened. The furniture consists in some arm-chairs, two or three sofas, and a great many looking-glasses, which the Europeans in these regions are very fond of. Several chandeliers and lamps are hung in a row, along the length of the gallery, which are lit up in the evening. The stairs leading to the upper rooms are generally at the end of this apartment. Six or seven steps up there is one which stands over the store-room, or cellar, in which the stock of wine, beer, butter, &c. is kept. Up stairs the houses are distributed almost similarly as below. They are, in general, but poorly provided with furniture, and the setting out of rooms in order is not so much in vogue here as in Holland: nothing is added that is superfluous, or more than is wanted for use. Behind the gallery are the lodgings for the slaves, the kitchen, &c. There are but few houses which have gardens, contrary to what Salmon erroneously asserts in his "Present State of all Nations;" and there are not even the least vestiges left of there having ever been gardens behind the houses. In several the windows are closed with a lattice-work of rattans, in the room of being glazed, for the sake of air.

The above relates only to the houses of Europeans, which are the greatest in number. The few Chinese who live at present within the city have very wretched houses, the inside of which is very irregularly distributed. Most of them dwell in the southern and western suburbs, which are called the Chinese Campon. Before the revolt of the year 1740, they had the best quarter of the city allotted to them, to the west of the great river; but when, in that commotion, all their houses were burnt to the ground\*,  
the

\* Several relations have been given to the public, at different times, of the horrid transaction here alluded to; of which the most circumstantial is in the *Modern Universal History*, b. xiv. chap. 7. No two, however, agree; and the following account, extracted from a very recent and intelligent Dutch writer, *Ary Huyfers*, who was long resident at Batavia, may therefore not be unacceptable. "It is to be found in his *Life of Reinier de Klerk*, 1788.—"A little before the perpetration of this massacre, several thousand Chinese adventurers and fortune hunters had resorted to Batavia, allured by the prosperity of their countrymen already settled there. The great number of these new colonists, together with the robberies and murders which were committed by them, excited no little degree of just apprehension. The famous Van Imhof, who was at that time a member of the council, proposed, in order to get rid of these useless and dangerous new-comers that every Chinese who could not prove that he had an honest livelihood should be seized and transported to Ceylon, there to be employed in mining, or other labour for the service of the Company. This advice was approved of, and immediately followed. A great number of Chinese were seized, and put in irons; but imprudently several Chinese of property were secured by the under-officers,  
charged

the whole quarter was made into a *passar*, or market, where, at present, all kinds of provisions are every day exposed to sale.

The poundage, or assessment, which is paid annually by every house, consists in half a month's rent. This money is expended in dragging and cleansing the canals, and in repairing the townhall, and other buildings belonging to the city. Permission must be requested every year, of the Company's government to levy this assessment, in behalf of the city, which is seldom refused.

The houses are not let by the year, but by the month; the rents run from five to forty rix-dollars per month. A good house, in an agreeable situation, may be hired for twenty or twenty-five rix-dollars\*.

The churches are repaired out of the duties levied upon funerals.

A bank of circulation, has been established here for some years, which is united with the lombard, or bank for lending money on pledges. It is under the administration of a director, who is generally a counsellor of India, two commissaries, a cashier, and a book-keeper.

A fee of five rix-dollars is given at the opening of an account, and stamped bank-bills, signed by the director and commissaries, are delivered for the money placed in

charged with the execution of the order, and were only liberated on paying large sums of money. This occasioned great murmurings, and led the rest of the nation to credit a report which was spread abroad, that those who were unable to pay would be drowned or otherwise put to death. They in consequence retired by thousands from the city, towards the interior parts, and strengthened themselves so much, as to render the fate of Batavia itself precarious. In this dilemma, the council first offered an amnesty to the discontented Chinese, but this they rejected with scorn; and purposing to exterminate the whole Christian settlement, began by ravaging the country in the wildest manner, burning the sugar-works, and marching down to the gates of the city. Here, however, they met with a severe rebuff. The civil and military inhabitants united in repelling them, and drove the rebels back again into the country. During these commotions the Chinese who resided within the town kept themselves perfectly quiet; and in order that these innocent people might not be exposed to insult, the government issued an order, prohibiting them from leaving their houses after six o'clock in the evening, and ordering them to keep their doors shut. This prudent precaution was not, however, sufficient to protect them from the fury of the irritated soldiery and sailors who were in the city, and had witnessed the devastations of the Chinese without the gates. On a sudden, and unexpectedly, an instantaneous cry of murder and horror resounded through the town, and the most dismal scene of barbarity and rapine presented itself on all sides. All the Chinese, without distinction, men, women, and children, were put to the sword. Neither pregnant women, nor sucking infants, were spared by the relentless assassins. The prisoners in chains, about a hundred in number, were at the same time slaughtered like sheep. European citizens, to whom some of the wealthy Chinese had fled for safety, violating every principle of humanity and morality, delivered them up to their sanguinary pursuers, and embezzled the property confided to them. In short, all the Chinese, guilty and innocent, were exterminated. And whence did the barbarous order, by which they suffered, emanate? Here a veil has industriously been drawn, and the truth will probably never be known with certainty. The governor-general Valkenier, and his brother-in-law Helvetius, were accused by the public voice of directing the massacre, but it was never proved upon them." It is remarkable, that when Valkenier was afterwards condemned to imprisonment for life, at Batavia, among the numerous charges brought against him for mal-administration during his government, no notice was taken of his presumed instrumentality in this dreadful massacre. Much apprehension was entertained that this occurrence would excite the indignation of the Emperor of China, and deputies were sent to him the following year to apologize for the measure. The letter written to the emperor on the occasion, is given at length by Huyfers: the only remarkable circumstance in which it differs from the above relation is the allegation, that some Chinese within the city had set fire to it in different places, and were preparing to rise upon the Europeans; but the extermination of the innocent with the guilty is acknowledged, and attempted to be excused on the plea of necessity. These deputies were agreeably surprised on finding that the emperor calmly answered, that "he was little solicitous for the fate of unworthy subjects, who, in the pursuit of lucre, had quitted their country, and abandoned the tombs of their ancestors." TR.

\* A rixdollar at Batavia is worth forty-eight stivers, or about four shillings and fourpence sterling. TR.  
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the bank. Its capital is computed to amount to between two and three millions of rix-dollars \*.

The suburbs of Batavia are remarkable, on account of their considerable extent, uncommon pleasantness, and great population. They are inhabited by Indians of various nations, and by some Europeans. The Chinese quarter is the most populous of all, and seems itself a city, with numerous streets; yet their houses are mean, and little. It is crowded with shops, containing all kinds of goods, as well those of their own manufacture, and such as they receive annually from China, as what they buy up of those imported from Europe. The number of the Chinese, who live both within and without the walls of the city, cannot be determined with precision; but it must be very considerable, as the Company receive a poll-tax from them of more than forty thousand rix-dollars.

Every Chinese, who has a profession, is obliged to pay a monthly poll-tax of half a ducatoon †; women, children, and those who have no trade, are exempted from the tax; so that their number can only be guessed at. They are under a chief of their own nation, who is known by the appellation of Chinese Captain; he lives within the walls, and has six lieutenants under him, in different districts. A flag is hoisted at his door, on the first or second day in every month, and the Chinese liable to the tax are then obliged to come to him to pay it.

Like the Jews in Europe, they very are cunning in trade, both in the largest dealings and in the most trifling pedlery. They are so desirous of money, that a Chinese will run three times from one end of the city to the other, if he have but the prospect of gaining one penny. In doing any business with them, the greatest care must be taken to avoid being cheated.

Their stature is rather short than tall, and they are in general tolerably square. They are not so brown as the Javanese. They shave their heads all round, leaving a bunch of hair on the middle of the crown, which is twisted with a ribbon, and hangs down the back. Their dress consists in a long robe of nankeen, or thin silk, with wide sleeves, and under it they wear drawers of the same which cover their legs.

In every house, there is a niche or place, where the image is hung up, of one of their jooftjes, or idols, painted on Chinese paper. Before it they keep one or more lamps always burning, as also a kind of incense, which is made into little thin tapers. This idol is generally depicted as an old man, with a square cap upon his head, and a female, designed for his wife, next to him. About an hour's walk out of the city, just beyond Fort Ansjol, they have a temple, standing in a grove of cocoa-nut-trees, by the side of a rivulet, and in the midst of a most pleasant scenery. The building is about twenty feet in length, and twelve or thirteen in breadth. The entrance is through a railing, into a small area, and then into a hall, behind which is the sanctuary. In the middle, just within the door is a large altar, on which tapers, made of red wax, are kept burning, night and day. There is also an image of a lion richly gilt. In a niche behind the altar, are representations of an old man and woman, both with crowns upon their heads, and about two feet in height, which are their idols; and as they look upon their jooftje to be an evil spirit, they continually supplicate him not to do them any harm. In their adorations, they prostrate themselves before him, and endeavour to express the awe and reverence they entertain, by striking their head continually against the ground.

\* Or between four hundred and thirty-five thousand and six hundred and fifty thousand pounds sterling. Tr.

† A ducatoon is sixty-six stivers, or six shillings sterling. Tr.

They likewise consult their idol when they are about any important undertaking. This divination is done by means of two small longitudinal pieces of wood, flat on one side, and round on the other. They hold these with the flat sides towards each other, and then letting them fall on the ground, augur of the effect of their prayers, and the good or bad result of their purposed enterprize, by the manner in which they lie, with the round or flat sides upwards. If the presage be favourable, they offer a wax-candle to their god, which the priest, or bonze, who attends at the temple, immediately turns into ready money.

In this temple, I saw a Chinese, who let these little sticks fall, above twenty times before they promised him success: he seemed to be but very little pleased with these repeated evil prognostications, and shaking his head at every time, with a most discontented look, he threw himself upon the ground, and thumped his head against it, till at last, the omen proved agreeable to his wishes; and he then joyfully lighted a thick wax-candle, and placed it upon the altar of his jooftje.

Besides this temple, the Chinese have several others, which are tolerated by the government; but it is worthy of observation, that whilst the practice of the most abominable idolatry is allowed, the exercise of the Roman Catholic religion is obstinately prohibited.

The Chinese are of a very lustful temper. They are accused of the most detestable violations of the laws of nature; and it is even said, that they keep swine in their houses, for purposes the most shameful and repugnant.

Their tombs, on which they expend a great deal of money, are partly built above, and partly under ground. They are arched over. The entrance, which is made like a doorway, is closed with a large stone, covered with engraved Chinese letters. They are to be seen in great numbers, about half an hour's walk from Batavia, on the road to Jaccatra.

They visit the graves of their ancestors and relations, from time to time: they strew them with odoriferous flowers; and when they depart, they leave a few small pieces of silk or linen before the entrance, and sometimes boiled rice, or other victuals; which is speedily made away with at night.

The environs at Batavia are very pleasant, and are almost every where intersected with rivulets, by which the circumjacent rice plantations are inundated, and fertilized in the proper season.

There are five principal roads, which lead from the city towards the country, and which are all planted with high and shady trees.

That which runs to the eastward, to Ansjol and the seacoast, is laid along the side of a rivulet, the stream of which running down an imperceptible slope is very slow, which makes it resemble the canals for inland navigation in Holland. Both sides of it are adorned with gardens; but they are beginning to be neglected, save one or two belonging to the director general.

At no great distance from the sea-shore, whither this road finally leads, there is an oyster-bed; and on the beach stands a house of entertainment, which is resorted to by the Europeans for the purpose of eating this shell-fish.

The second road has the appellation of the mango-doa, from its having been formerly planted with a double row of mango-trees. This runs more south than the former one, and farther inland. Along this road there are likewise many gardens, but they are none of them so splendid and pleasant as those which border and embellish the road to Jaccatra: for there the finest picture that can be conceived presents itself to the delighted eye, both with respect to the grandeur of the buildings and  
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the elegance of the grounds. Most of the houses belonging to them, have their fronts towards the road, and from the back rooms they have a prospect of the river of Jaccatra.

This road is nearly two hundred feet broad, and is closely planted with trees. I do not know that I ever beheld a more delightful avenue. It terminates at a small fort, which is called Jaccatra, situated about half a Dutch mile from Batavia, and though the road is continued thence to Weltevreden, the country-seat of the governor general, and beyond it farther into the country, it assumes, on the other side of Jaccatra, the name of Goenong Sari.

The fourth is called the Molenvliet, or mill-drain, because part of the water of the great or Jaccatra river is diverted through a channel, along this road, for the purpose of turning a powder-mill, which stands scarcely ten minutes walk from the city. The road leads along the canal for full half a Dutch mile up the country, and is equally adorned on both sides with handsome houses and pleasant gardens. It then proceeds to Tanabang, where a large market is held every Saturday, for all kinds of provisions, which are brought thither from the interior parts.

The fifth road leads through the Chinese Campon, also along a river, to Fort Ankey, and is, in like manner, bordered on both sides with gardens.

None of these roads nor any of the streets in the city are paved; the ground consists of a hard clay, which is made very smooth and plain; only in the city, along the sides of the streets, by the houses are stone footpaths of about three or four feet in breadth \*.

**CHAP. IV.—Government of Batavia—Council of India—Governor-General—Director-General—Counsellors of India—Council of Justice—Board of Schcepens—Punishments—Impalement—Mucks—Orphan Chamber—Society for the Opium Trade—Chief of the Marine—Commandant and Upper Comptroller of Equipment—Vice Commandant—Military—Militia—Of Ranks and Precedency—Sumptuary Laws—Clergymen—Coins—Weights—Measures.**

THE chief government of Batavia, and of all the possessions of the Dutch East India Company in Asia, is vested in the council of India, with the governor-general at their head.

This council consisted, when I was there, besides the director-general, of five ordinary counsellors, including the governor of the Cape of Good Hope, nine extraordinary counsellors, and two secretaries.

Five of the extraordinary counsellors were governors of the out-factories of Java's north-east coast, Coromandel, Amboyna, Ceylon, and Macassar.

This council determines affairs of every kind, those which relate to the administration of justice alone excepted. Yet in civil matters, an appeal may be made from the sentence of the council of justice to the council of India.

All appointments and promotions to offices are effected by the council of India, not excepting that of the governor-general; but this must be confirmed by the assembly of seventeen, in the Netherlands†.

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\* The streets and canals at Batavia are planted on each side with large trees; generally the onophyllum calophyllum and calaba, the canarium commune, and some others still scarcer. **TR.**

† Ecclesiastical preferments, and the appointment of the ministers of justice, proceed immediately from the direction in Holland. In the council of India, the governor and director general, and the five ordinary counsellors.

The authority of the governor-general is almost unbounded; and although he is obliged to give cognizance to the council, and consult them on some matters, he possesses a most arbitrary and independent power in all: for there are few or no members of the council who do not stand in need of his good offices in some instance or other; for example, in order to obtain lucrative employments for their relations or favourites\*; and if this be not sufficient to make them obey the nod of the governor, he is not destitute of the means of tormenting them, in every way, under various pretences: nay, of sending them prisoners to Europe; as was done, with respect to MM. Van Imhof, de Haaze, and Van Schinnen, in the year 1740, by the governor-general Valkenier†. As, therefore, those who are immediately next to him in rank, depend upon and stand in awe of him, it follows, that the servants of the Company who are in inferior stations feel still deeper reverence, and tremble before him, as in the presence of one from whose arbitrary will and power their happiness or misery wholly depends: the slavish submission with which his commands are received and executed is, in consequence, scarcely credible; for how is it possible that freeborn Hollanders should bow themselves so low, beneath the ignominious yoke!

His excellency the governor-general, at present, usually resides at his country seat, called Weltevreden, about an hour and a quarter's walk from Batavia, and which is a superb mansion.

He gives public audience here every Monday and Thursday; and on Tuesdays and Fridays at another seat, situated nearer to the city, on the Jacatra road. On the other days of the week, he is inaccessible to every body, and cannot be spoken to unless on affairs of the greatest importance and urgency. Nobody goes thither without having some business to call him; for it would be taken extremely ill if any one was to pay a visit of mere ceremony. The time of audience is from six o'clock in the morning till eight. Every one waits in the open air, in the court before the house, till he is called in by one of the body guards.

When the governor rides out, he is always accompanied by some of his horse-guards. An officer and two trumpeters precede his approach, and every person who

counsellors alone conclude upon most matters that are brought before them; the other nine members are properly only assessors, who may give their advice, but have no votes, except in the question of war or peace with the Indians, in the pardoning of criminals condemned to death, in the election of a governor general, and in a few other important points. The power and influence of this body in the Indies are unbounded. It is the representative of the state and of the Company, and millions of Indians are subject to its sway. Kings and princes are crowned and dethroned by its mandates. "I have been witness," says Ary Huyfers, a writer to whom we have before had occasion to refer, "to the deposition of two powerful kings of the Moluccas, and the hereditary prince of Tidore. One of these died miserably in a little village near the place of my residence. I saw the venerable old man before his death: he was seventy-two years of age. When I expressed my commiseration at the deep humiliation he had undergone, he answered, with a sigh, in the Malay language, pointing to heaven, 'It is the will of God.'" Other instances of the tyranny of the Dutch Company over the natives princes, are related in the present work. Tr.

\* By the second article of the oath taken by the governor general, as likewise by the counsellors of India, on their appointment, they engage "never to receive any gifts or presents, directly or indirectly, from any one under their authority; neither in respect, or in the hope or expectation thereof, nor of any advantage, favour, or other private consideration, either of relationship, friendship, or otherwise, to appoint, or cause to be appointed, any other individual to an office, place, or station, than such as they believe and find to possess the most experience, the most integrity, the most fidelity, and the most ability for the same." So much do men regard oaths! Tr.

† Valkenier, who was the personal enemy of the above gentlemen, tyrannically abused his authority, in so far, that when the council of India refused to sanction this arbitrary measure, he surrounded the council table with a body of armed men, and thus constrained them to assent to his wishes. Tr.

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meets him, and happens to be in a carriage, must stop, and step out of it, till he has rode by\*.

A company of dragoons always mount guard at Weltevreden. He has besides some halberdiers, who are employed in carrying messages and commands, and who always are attendant on the governor's person, wherever he goes. They are dressed in short coats of scarlet cloth, richly laced with gold, and follow in rank upon the junior ensign in the Company's service.

When his excellency enters the church, all persons, both men and women, the counsellors of India not excepted, stand up, in token of respect†. His lady receives the same honours, and is equally escorted by a party of horse-guards, when she rides out.

The governor-general, who was in office at that time, was Mr. Peter Albert Van der Parra, a native of Colombo, the chief settlement of the Dutch in Ceylon. He was a man inimical to all pomp, and in this respect very different from most of his predecessors. He was remarkably temperate, generally drinking pure water, and seldom taking any wine or beer. He was commonly occupied the whole day; and when he did not assist at the council-table, he was closeted with his secretary and clerks.

The director-general, who is the eldest counsellor of India, is the next in rank. The direction and controul over the trade of the Company, throughout all India and to Europe, together with every thing that relates to it, is exclusively entrusted to him. The governor-general does not in the least meddle in these matters, if the director have but the needful ability.

Next in order follow the ordinary and extraordinary counsellors of India. Those who reside at Batavia are also usually presidents of different boards or courts. Every counsellor of India has likewise the correspondence with one of the out-factories allotted to him; the general himself has that of one or two settlements, and no one is excused, in this respect, but the director, on account of his multifarious other avocations.

Although every member of the council lies under this obligation, there are but few of them who take the trouble of the charge upon themselves; most of them cause it to be effected by persons of a lower rank; and the best institutions are thus perverted by selfishness and sloth.

When a counsellor of India, or his lady, enters a church, all the men stand up, in the same manner as for the governor general, but the women remain sitting. On

\* This humiliating homage, as well as that paid to the *Edele heeren*, or counsellors of India, as will be presently noticed, are equally required from foreigners. These ceremonies are generally complied with by the captains of Indiamen, and other trading ships; "but," says Captain Carteret, who was at Batavia, in 1768, "having the honour to bear His Majesty's commission, I did not think myself at liberty to pay to a Dutch governor any homage which is not paid to my own Sovereign: it is, however, constantly required of the King's officers; and two or three days after my arrival, the landlord of the hotel where I lodged told me, he had been ordered by the shebandar to let me know that my carriage, as well as others, must stop if I should meet the governor, or any of the council; but I desired him to acquaint the shebandar that I could not consent to perform any such ceremony; and upon his intimating something about the black men with sticks, who precede the approach of these great men, I told him that if any insult should be offered me, I knew how to defend myself, and would take care to be upon my guard; at the same time, pointing to my pistols, which happened to lie upon the table: upon this he went away and about three hours afterwards returned, and told me he had orders from the governor to acquaint me that I might do as I pleased." Since that time, the English officers have never been required to comply with this degrading custom; yet when they have been in an hired carriage, nothing has deterred the coachman from stopping and alighting in honour of the Dutch grandee, but the most peremptory menace of immediate death. *Tr.*

† This etiquette was abolished upon the accession of R. de Klerk to the government in 1777, as appears in the sequel. *Tr.*

meeting one of them in a carriage, every body must stop, rise up, and bow to them, and stay till they are gone by. When they go out they have two slaves, who run before them with sticks, while other people are allowed but one.

There are always two secretaries of the government, who take down in writing all the propositions or resolutions which have been discussed in the council, and lay them before the governor-general, when the assembly is broke up. He examines them, and gives directions what is to be made into decrees, and what is only to be inserted in the journals for notification. The resolutions being then drawn up in writing, by the first secretary, they are again presented to the governor, who makes such alterations in them as he thinks fit; and at the ensuing session of the council, they are read over, and approved.

The salary of a counsellor of India is a thousand rix-dollars per annum; besides which he has six hundred rixdollars for house-rent, seven hundred for his trouble in signing dispatches, three hundred towards providing his table, together with a considerable allowance of provisions from the Company's warehouses. Taking every thing together, he can reckon upon a yearly income of four thousand rix-dollars, or nine thousand six hundred guilders\*. Besides the above, the first secretary has the emoluments attending the making out of the commissions, which do not amount to a trifle, especially when many appointments of governors, directors, or commandants occur, who pay liberally for their commissions; sometimes giving fees to the amount of a thousand rix-dollars. Yet none of them can save any thing from this income, which they amply want for their household expences, for which reason they are generally favoured with the government or directorship of an out-settlement, after they have been three or four years in the council.

The private secretary of the governor-general is usually promoted to be secretary to the council, upon a vacancy.

Thirty-six or forty clerks are daily employed in the secretary's office, which is next to the government-house, in the castle. They have, for the most part, the rank of junior merchants; nevertheless, they are not able to earn more than a bare sufficiency to subsist on.

Justice is administered to the servants of the Company by an assembly having the appellation of council of justice. This body is, by its constitution, independent of the council of India; but, as the members of which it consists have equally many wants and wishes to be fulfilled, they likewise endeavour to be near the fountain head of promotion and advantage; and, as well as all others, follow the inclinations of their sovereign ruler, in all cases that are brought before them. This council consists of a president who ranks next to the junior counsellor of India, eight ordinary members, and two adjutors, taken from the Company's servants. Their salary is, as I was informed, no more than two thousand two hundred rix-dollars; which is scarcely sufficient for the support of their establishments: they are, besides, obliged to serve the office of counsellor of justice for the space of ten years before they may be candidates for any other office. There are two fiscals belonging to this council, one of which bears the title of advocate-fiscal, or attorney-general, but whose office relates only to the persons in the Company's service both by sea and by land. The other is styled the water-fiscal, and through whom all indictments relative to navigation are made. This was formerly one of the most lucrative employments of all India, and it is still very advantageous, though not so much so as before, because the private trade is nothing like so flourishing as it was in former times. The methods by which fortunes were

About eight hundred and seventy-five pounds sterling. Tr.

made in this office, will easily be conceived by seafaring people. The secretary of the council of justice has the rank of merchant.

The citizens and free merchants of Batavia, who are not in the Company's service, are amenable to a separate municipal court of justice, being what is called the board of *schepens*, or aldermen, who are eight in number, with a president, who is a member of the council of India.

To this court belong a sheriff for the matters which relate to the city, and a constable of the territory of Batavia; both of which are very lucrative offices, and are never bestowed but on great favourites.

The punishments inflicted at Batavia are excessively severe, especially such as fall upon the Indians. Impalement is the chief and most terrible.

In the year 1769, I saw an execution of this kind, of a Macasser slave, who had murdered his master; which was done in the following manner. The criminal was led in the morning to the place of execution, being the grass-plot, which I have before taken notice of, and laid upon his belly, being held by four men. The executioner then made a transverse incision at the lower part of the body, as far as the os sacrum; he then introduced the sharp point of the spike, which was about six feet long, and made of polished iron, into the wound, so that it passed between the backbone and the skin. Two men drove it forcibly up, along the spine, while the executioner held the end, and gave it a proper direction, till it came out between the neck and shoulders. The lower end was then put into a wooden post, and rivetted fast; and the sufferer was lifted up thus impaled, and the post stuck in the ground. At the top of the post, about ten feet from the ground, there was a kind of little bench, upon which the body rested.

The insensibility, or fortitude, of the miserable sufferer was incredible. He did not utter the least complaint, except when the spike was rivetted into the pillar; the hammering and shaking occasioned by it, seemed to be intolerable to him, and he then belowed out for pain; and likewise once again, when he was lifted up and set in the ground. He sat in this dreadful situation, till death put an end to his torments, which fortunately happened the next day, about three o'clock in the afternoon. He owed this speedy termination of his misery to a light shower of rain, which continued for about an hour; and he gave up the ghost half an hour afterwards.

There have been instances at Batavia of criminals who have been impaled in the dry season, and have remained alive for eight or more days, without any food or drink, which is prevented to be given them, by a guard who is stationed at the place of execution, for that purpose. One of the surgeons of the city assured me, that none of the parts immediately necessary to life are injured by impalement, which makes the punishment the more cruel and intolerable; but that as soon as any water gets into the wound, it mortifies and occasions a gangrene, which directly attacks the more noble parts, and brings on death almost immediately.

This miserable sufferer continually complained of unsufferable thirst, which is peculiarly incident to this terrible punishment. The criminals are exposed, during the whole day, to the burning rays of the sun, and are unceasingly tormented by numerous stinging insects.

I went to see him again, about three hours before he died, and found him conversing with the by-standers. He related to them the manner in which he had murdered his good master, and expressed his repentance and abhorrence of the crime he had committed. This he did with great composure; yet an instant afterwards, he



burst out in the bitterest complaints of unquenchable thirst, and raved for drink, while no one was allowed to alleviate, by a single drop of water, the excruciating torments he underwent.

This kind of punishment, notwithstanding its great cruelty, is asserted by many to be of the highest necessity, in a country where a treacherous race of men, unrestrained by any moral principles from the perpetration of the greatest crimes, perform the daily menial and household services of the Europeans. The slaves that come from the island of Celebes, and especially the Bouginese, are guilty of the most horrid murders: most of those who run mucks belong to that nation.

These acts of indiscriminate murder, are called by us mucks, because the perpetrators of them, during their frenzy, continually cry out, "amok, amok," which signifies, kill, kill. When, by the swallowing of much opium or by other means, they are raised to a pitch of desperate fury, they fall out with a knife, or other weapon in their hand, and kill, without distinction of sex, rank, or age, whoever they meet in the streets of Batavia; and proceed in this way, till they are either shot dead, or taken prisoners. Their intoxication continues till death; they run in upon the arms opposed to them, and often kill their opponents, even after they are themselves mortally wounded.

In order, if possible, to take them alive, the officers of justice are provided with a pole, ten or twelve feet in length, at the end of which there is a kind of fork made of two pieces of wood, three feet long, which are furnished within with sharp iron spikes; this is held before the wretched object of pursuit, who, in his frenzy, runs into it, and is thus taken prisoner.

If he happen to be mortally wounded, he is immediately broken alive upon the wheel, without any form of trial, in the presence of two or three of the counsellors of justice.

Many instances of mucks occurred, during my residence at Batavia; they were mostly done in the evening \*.

The

\* It is remarkable, that at Batavia, where the assassins just now described, when taken alive, are broken on the wheel, with every aggravation of punishment that the most rigorous justice can inflict, the mucks yet happen in great frequency; whilst at Bencoolen, where they are executed in the most simple and expeditious manner, the offence is extremely rare. Excesses of severity in punishment may deter men from deliberate and interested acts of villainy, but they only exasperate still further the atrocious enthusiasm of desperadoes. The Indian who runs a muck is always first driven to desperation by some outrage, and always first revenges himself upon those who have done him wrong: they are generally slaves, who indeed are most subject to insults, and least able to obtain legal redress. It has been usual to attribute mucks to the consequences of the use of opium; but the words of Mr. Stavorinus, who says that they are occasioned "by the swallowing of opium, or by other means," seem to confirm the opinion entertained by Marsden, that this should probably rank with the many errors that mankind have been led into by travellers addicted to the marvellous. That these furious quarrels and sanguinary attacks do actually and frequently take place in some parts of the east, cannot be controverted; but it is not equally evident that they proceed from any intoxication except that of their unruly passions; and many mucks might upon scrutiny be found to be of the nature of one which Mr. Marsden particularizes, of a slave, who probably never indulged in the use of opium in his life, a man of strong feelings, driven by excess of injury to domestic rebellion; or of that related in Lieutenant Cook's voyage in the Endeavour, of a free inhabitant of Batavia, whose brain was fired more by the maddening fury of jealousy, than by any adventitious intoxication. It is true that the Malays, when bent upon any daring enterprise, fortify themselves with a little opium, in order to become insensible to danger; as the people of another nation are said to take a dram; but it must be observed, that the resolution for the act precedes and is not the effect of the intoxication. They take the same precaution, previous to being led to public execution; but on these occasions, shew greater signs of stupidity than of frenzy. Upon the whole it may reasonably be concluded, that the sanguinary achievements for which the Malays have been famous, or infamous rather, are more justly derived from

The orphan-chamber at Batavia serves at the same time for the whole of the Dutch possessions in India. Every out-factory has, it is true, its own orphan-chamber; but they must render account of their administration, to that of the capital, and remit the effects which are not claimed, or the heirs to which do not reside on the spot. That of Batavia corresponds with the orphan-chambers of the different cities where the chambers of the East India Company are established \*.

The board consists of a president, who is a counsellor of India, and six weefmeesters, or regents, who are appointed by the council of India; with a secretary, and a sworn clerk. The capital stock, remaining in the hands of the orphan-chamber, amounted in the year 1766 to f. 2,393,566 †.

There are several other courts, or boards, as the commissioners of dikes and sluices, those of bankruptcies, a court of common pleas, a board of controul over marriages, and others.

A society was established at Batavia, during the government of Baron Van Imhof, for the opium-trade, which is still in existence.

The stock of the society is divided into shares of two thousand rix-dollars each, on which the half has hitherto only been furnished, but the remainder may be required at any time.

The dividends are unequal, yet very large, and the shares are sold at a high premium; they are generally in the hands of the counsellors of India.

The management of this trade is entrusted to a director, who is a counsellor of India, two acting proprietors, a cashier, and a book keeper.

Every chest of opium stands the Company in two hundred and fifty, and sometimes in three hundred rix-dollars, and is delivered to the society for five hundred, and sometimes more. On the other hand, the Company is bound to sell this drug to no other. The retail of it produces large profits, as the society make eight or nine hundred rix-dollars, and more, of every chest. The gain would be more considerable, if this monopoly could be strictly enforced, for the whole quantity of opium, consumed in the eastern parts of India; but, notwithstanding the Company have interdicted this trade to their servants, and especially to the seamen, upon pain of death, and have prohibited the importation into any of their possessions, by foreign nations, upon pain of confiscation of ship and cargo, yet very great violations of these laws are daily practised in secret on account of the important profit which this branch of trade affords; by which the society is much injured, although on their part they do all they can, on the arrival of ships from the Ganges, to discover if any contraband opium be on board: but those who engage in this illicit trade take too many precautions to run any danger of detection. The smuggling trade which the English carry on in this article, in the eastern islands and by way of Malacca, is also extremely detrimental to the society.

the natural ferocity of their disposition, than from the qualities of any drug whatever. At Batavia, if an officer take one of these amoks, or mohawks as they have been called by an easy corruption, alive his reward is very considerable, but if he kill them nothing is added to his usual pay; yet such is the fury of their desperation, that three out of four are of necessity destroyed in the attempt to secure them. TR.

\* Weefkamers, or orphan-chambers, are establishments which are dispersed throughout the United Provinces, for the administration of the estates of all who die intestate, and the apportionment of them among the heirs. TR.

† About two hundred and twenty thousand pounds sterling. TR.

When any ships arrive in the road of Batavia, from such places whence contraband goods can be brought, two of the members of the council of justice, with the water-fiscal, and the provost-marshal, are dispatched the next day, in order to examine whether any prohibited wares are on board; the examination however is only personally done by the last-named officer, who reports the result to the others.

A chief of the marine, or port admiral, has been established at Batavia since the year 1762. This office was filled by Mr. N. Houtingh, vice-admiral of Holland, of the northern division. He is in rank equal to a counsellor of India, but takes place after the junior counsellor. He has the same privileges; has equally the style of *Edele heer*, and may be present at their assemblies, but may not deliver his sentiments, except in matters relative to his department.

His chief occupation consists in superintending the reparation of ships; in examining the ships' journals; in signing the sailing orders, and the warrants for delivery of stores to the ships; and further, in keeping all that relates to maritime affairs in due order.

Upon this officer follows the commandant and upper comptroller of equipment, to whom the management of the stores is confided. He has likewise the superintendence over the discharging and loading of the ships, the manning of them, and the furnishing them with provisions. This is also one of the most lucrative, but at the same time one of the most troublesome, employments at Batavia. Since he has a head placed over him; however, the former quality has greatly decreased, while the latter has remained in full force. He is assisted by a vice-commandant and under-comptroller of equipment, to whom he generally delegates the superintendence of the loading and unloading of the ships, and who supplies his place in cases of sickness or absence. This gentleman has the rank of post-captain.

The Company have granted to these three officers, as an emolument, the privilege of shipping some tons of goods (contraband wares excepted) by every ship that sails to India, according to the size of the vessels; and if a ship's captain do not buy up these goods of them, at a very high rate, he is sure to find very scanty opportunities of disposing of his own.

The commanders of vessels, with their lieutenants and mates, follow next in order; the first rank equal with merchants: when I was at Batavia, in 1770, there were thirty-nine of them who resided there or commanded country ships.

The whole of the land-forces of the Dutch in India are under the command of one head, who was formerly styled captain-major, but has now the title of brigadier. In rank he follows upon the chief of the marine. He has two lieutenant-colonels under him; one of whom has the command of the military at Batavia, and the other at Ceylon; there are besides six majors, two of whom reside at Ceylon, one on the Malabar coast, one at the Cape of Good Hope, and two at Batavia; one of these last is, at the same time, chief of the artillery.

There is a regiment of dragoons, which serve as a body guard to the governor general. The infantry are divided into two battalions, and are quartered within and without the city.

Besides these regular troops, two companies called *pennists* are embodied, consisting in merchants, junior merchants, book-keepers, and assistants. One company are called *pennists* of the castle, and the other *pennists* of the city. The former are commanded by the first secretary of the government, and the latter by one of the senior merchants of the castle. They are reviewed once a year by the governor general and the council; and each company have a distinct uniform.

The other Company's servants are also formed into two companies, one consisting in the marines and others belonging to the admiralty wharf, with the commandant and upper comptroller of equipment at their head; the other of the workmen of the *ambagts kwartier*, with the *fabriek* as their captain.

Independently of these, all the free inhabitants, or citizens, are likewise enrolled in two companies of horse and of foot, which are commanded by a counsellor of India, as colonel, and mount guard every night at the town-hall.

All the practitioners of surgery are subordinate to a chief, who has the controul over all the surgeons, and surgeon's mates, as well on board of the ships as in the hospitals; and who has the rank of senior merchant.

It will not be unfruitful in this place, to make some mention of the distinctions of precedence and rank, which are so minutely attended to in all the Company's possessions in India, and which may, on no account, be neglected; more especially in all public companies and assemblies. Every individual is as stiff and formal, and is as feelingly alive to every infringement of his privileges, in this respect, as if his happiness or misery depended wholly upon the due observance of them. Nothing is more particularly attended to, at entertainments and in companies, by the master of the house, than the seating of every guest, and drinking their healths in the exact order of precedence. The ladies are peculiarly prone to insist upon every prerogative attached to the station of their husbands; some of them, if they conceive themselves placed a jot lower than they are entitled to, will sit in sullen and proud silence for the whole time the entertainment lasts. It does not unfrequently happen, that two ladies of equal rank, meeting each other in their carriages, one will not give way to the other, though they may be forced to remain for hours in the street. Not long before I left Batavia, this happened between two clergymen's wives, who chancing to meet in their carriages in a narrow place, neither would give way, but stopped the passage for full a quarter of an hour, during which time, they abused each other in the most virulent manner, making use of the most reproachful epithets, and whore and slave's brat were bandied about without mercy: the mother of one of these ladies, it seems, had been a slave, and the other, as I was told, was not a little suspected of richly deserving the first appellation: they, at last, rode by one another, continuing their railing till they were out of sight; but this occurrence was the occasion of an action, which was brought before the council, and carried on with the greatest virulence and perseverance.

To provide against these disputes on the subject of precedence, the respective ranks of all the Company's servants were ascertained by a resolution of government, which was renewed in 1764; and a regulation respecting the pomp of funeral processions, was at the same time added to it, which is still in force.

Regulations were likewise introduced with respect to dress, during the government of the governor-general *Mossel*; by which persons of a certain condition were alone allowed to wear embroidered or laced clothes; but this is but little attended to at present, for almost every one who chooses now goes dressed in this forbidden finery, and sumptuary laws soon grow into disuse here as well as in other places. Velvet coats are, however, not common, and they are absolutely prohibited to be worn by any one under the rank of senior merchant\*.

When

\* The act by which these regulations were established, is composed, together with a supplement, of a hundred and thirty-one articles, and relates to all the Dutch settlements in India. It enters into the most minute detail respecting the carriages, horses, chairs, servants, dress, &c. of the Company's servants, and exhibits a strange picture of meanness and illiberality in the midst of affected grandeur. By the 8th article, little.

When their number is complete, there are twelve clergymen of the reformed religion at Batavia, six of whom preach in the Dutch, four in the Portuguese, and two in the Malay languages; there are likewise three Lutheran ministers, who preach in Dutch.

Service is performed every Sunday in the above three languages; in Dutch, at two churches in the morning, but only at one in the afternoon. An examination of catechumens takes place every Wednesday evening. So that upon the whole these reverend gentlemen need not complain, when their number is complete, of too severe labour in the vineyard of the Lord. The morning service commences at half past eight o'clock, and is generally over by ten, when the greatest heat of the day begins to come on.

Ecclesiastical disputes are never heard of here. The Company's government, who are extremely anxious to avoid every thing that could interrupt the public tranquillity, would soon terminate the quarrel, by the summary argument of force; an example whereof is to be met with in Valentyn.

It is much to be wished, that upright and learned clergymen were alone sent hither. Yet that this is not always the case, appears from a resolution taken by the government there in the year 1768, earnestly to request that the assembly of seventeen would dispatch some ministers of the gospel, possessed of virtue and learning, to Batavia, with an augmentation of salaries and emoluments. Their salary was then one thousand eight hundred guilders per annum, but with their allowances for house-rent, board, &c. they could reckon upon three thousand \*, which is certainly not enough to live upon at Batavia, with a family, and on an equal footing with the senior merchants.

Once in every year, or sometimes only once in two years, one of the clergymen of Batavia, goes upon a visitation to the Company's possessions on Sumatra's west coast.

little chaifes for children, drawn by the hand, must not be gilt, or painted, but in the exact proportion of the rank of the parents. By the 31st, it is ordained, that no one lower in rank than a merchant shall make use of a parasol, or umbrella, in the neighbourhood of the castle, except when it rains. Ladies, whose husbands are below the rank of counsellors of India, may not wear at one time jewels of more in value than six thousand rix-dollars; wives of senior merchants are limited to four thousand, others to three thousand, and a thousand. Article 49th, permits ladies of the higher ranks to go abroad with three female attendants, who may wear "ear-rings of single middle-sized diamonds, gold hair-pins, petticoats of cloth of gold, or silver, or of silk, jackets of gold or silver gauze, chains of gold, or of beads, and girdles of gold, but neither pearls, nor diamonds, nor any other kind of jewels in the hair." Wives of senior merchants may have two, and ladies in an inferior station one maid, who may wear "ear-rings of small diamonds, gold hair-pins, a jacket of fine linen, and a chintz petticoat, but no gold or silver fluffs or silks, or any jewels, true or false pearls, or any other ornaments of gold." By article 65, none but persons of the highest rank are allowed to have any trumpets, clarions, or drums among the music, with which it is customary to entertain guests during dinner. There is a wise recommendation in the 83d article, to the officers of the Company in Bengal, not to surpass their predecessors in pomp of dress or appearance, and especially not the governors or chiefs of the other European settlements. Perhaps the 110th article is the most curious of all. It allows to the director at Surat when he goes out in state, among other things, four fans, made according to the fashion of the country, with the feathers of birds of paradise, and cow-hair, with golden cases and handles. It is in this same act of the council that the orders before noticed, respecting the homage to be paid by every one on meeting the members of the government in their carriages, or when they enter the churches are inserted. It likewise fixes the duties to be paid upon all carriages, horses, &c. It is worthy of observation, that those upon carriages increase downwards, from the higher to the lower ranks; members of the government pay fifty rix-dollars per annum, captains of the military, merchants, &c. 100, junior merchants, &c. 125, book-keepers, &c. 180, citizens of no special rank, and native inhabitants of consideration 200, and the common natives 300 rixdollars, for keeping of carriages. Larger or smaller fines are the penalties attached to the infraction of almost all these sumptuary regulations. Where wealth and pride unite, they are therefore of little avail to restrain an excess of luxury. TR.

\* About 275l. sterling. TR.

Some of them well know how to avail of such occasions, to the advantage of their pockets, by taking with them as much merchandize for sale as they can find room for in the ship, by which they take their passage.

The coins current at Batavia are the following: the milled Dutch gold ducat, which is worth six gilders and twelve stivers: the Japan gold coupangs, of which the old go for twenty-four gilders, and the new for fourteen gilders and eight stivers: the Spanish dollar, or piafter, rises and falls according to the quantity in circulation, or the degree of demand; its value is generally between sixty-three and sixty-six stivers: the milled silver ducatoon, which is the current coin of the Company, throughout their possessions, except on the continent of India; its proportionate value according to the other coins is sixty-six stivers; but in Indian money it goes for eighty, at which rate it is current at Batavia; at the Cape of Good Hope it is worth seventy-two, and at Cochin seventy-five stivers: the unmilled ducatoon is two stivers less at Batavia: the milled Batavia rupee called the silver derham d'Java, which was formerly coined at Batavia, is made good in the Company's books at twenty-four stivers, and in circulation it is taken at thirty; it is the only rupee that goes for so much at Batavia, and is current at Amboyna, Banda, Ternate, Macassar, and Malacca, at the same rate, but on the coast of Malabar, it is eight per cent. less in value than the Surat rupee; all other rupees generally go for twenty-seven stivers; the Persian rupees are the most current; there are also half and quarter rupees in circulation: the smaller coins are skillings, dubbeltjes, or two-penny-pieces, and doits; there are two sorts of skillings, the old, which are the same as are current in Holland, go for six stivers, but the new, which are here called ship-skillings, are worth seven and a half: two-penny-pieces, which are old and worn, go for two stivers, but the new for two stivers and a half; no other doits are taken in change than those that are stamped with the mark of the East India Company, and these are equal to a farthing in value: the rix-dollar, which is the money used for accounts in private trade, is a coin, which is worth forty-eight stivers, thus three new or milled ducatoons are equal to five rix-dollars\*.

Most merchants' goods are calculated at Batavia by picols of one hundred and twenty-five pounds, Amsterdam weight †, and these are subdivided into a hundred cattis, each weighing one pound and a quarter.

Rice and other grain is measured by coyangs, which differ in weight. On the receipt of the rice by the Company at Java, they must weigh three thousand five hundred pounds. They are shipped to Batavia for three thousand four hundred, and landed there for three thousand three hundred. The warehouse-keepers dispatch them for the out-factories for three thousand two hundred, where they are unloaden for three

\* The following is a table of the value in sterling money of the above coins, at the par exchange of *f. 11* per pound; viz.

		£.	s.	d.
The old Japan gold coupang	-	<i>f.</i> 24	0	or 2 3 7½
The new ditto	-	14	8	1 6 2½
The milled Dutch ducat	-	6	12	0 12 0
The silver milled ducatoon	-	4	0	0 7 3¼
The unmilled ditto	-	3	18	0 7 1
The Spanish dollar	from	3	3	0 5 8½
	to	3	6	0 6 0
The rix-dollar	-	2	8	0 4 4½
The Batavia rupee	-	1	10	0 2 8½
Other rupees, about	-	1	7	0 2 5½

† Ricaud, in his *Traité de Commerce*, makes the picol, at Batavia, equal to 118½ lb. Amsterdam weight.

thousand

thousand one hundred, and, finally, they are delivered for consumption for three thousand pounds at the out-factories, namely, those that receive their rice from Batavia, as Malacca, the Cape of Good Hope, Ceylon, Sumatra's west coast, &c. thus every coyang loses five hundred pounds in weight\*.

Sugar is taken by canassers of three picols, or three hundred and seventy-five pounds, neat, each: the gross weight is about four hundred or four hundred and five pounds.

The ganting is a small rice measure, of thirteen pounds and a half in weight.

Every bag of coffee, which is shipped from Batavia to Holland, weighs two hundred and fifty-two, and a bale of cinnamon, eighty pounds.

CHAP. V. — *Mode of Living of the Europeans at Batavia.* — *Women.* — *Their early Marriages.* — *Complexion.* — *Temper.* — *Manner of Life.* — *Education of Children.* — *Bathing.* — *Excessive Jealousy of the Indian Ladies.* — *Cruelty to their Female Slaves.* — *Short Widowhoods.* — *Their Dress.* — *Diversions.* — *Carriages.* — *Norimons.* — *Carts drawn by Buffaloes.* — *Further Particulars of the Management of the Company's Trade.* — *Senior Merchants of the Castle.* — *Administrators, or Warehouse-keepers.* — *Commissaries at the Warehouses.* — *Exportation of Gold and Silver to India.*

EUROPEANS, whether Dutch or of any other nation, and in whatever station they are, live at Batavia nearly in the same manner. In the morning at five o'clock, or earlier, when the day breaks, they get up. Many of them then go and sit at their doors; but others stay in the house, with nothing but a light gown, in which they sleep, thrown over their naked limbs; they then breakfast upon coffee or tea; afterwards they dress, and go out to attend to the business they may have. Almost all, who have any place or employment, must be at their proper station at or before eight o'clock, and they remain at work till eleven, or half past. At twelve o'clock they dine; take an afternoon's nap till four, and attend to their business again till six, or take a tour out of the city in a carriage. At six o'clock they assemble in companies, and play or converse till nine, when they return home; whoever chooses to stay to supper is welcome; and eleven o'clock is the usual hour of retiring to rest. Convivial gaiety seems to reign among them, and yet it is linked with a kind of suspicious reserve, which pervades all stations and all companies, and is the consequence of an arbitrary and jealous government. The least word, that may be wrested to an evil meaning, may bring on very serious consequences, if it reach the ears of the person who is aggrieved either in fact or imagination. I have heard many people assert, that they would not confide in their own brothers, in this country.

No women are present at these assemblies, they have their own separate companies.

Married men neither give themselves much concern about their wives, nor shew them much regard. They seldom converse with them, at least not on useful subjects, or such as concern society. After having been married for years, the ladies

\* This deficiency is an allowance which is made to the Company's servants who respectively have the management of the rice, for instance, for every 3,300 received at Batavia, the warehouse-keepers are only bound to deliver 3,200, &c. Out of this difference they must make good all loss by dust, &c. and what they can keep over is a perquisite to themselves. Similar allowances are made on most of the goods in which the Company trade, and they are all very particularly fixed by a resolution of the council. They form a very material part of the income of the Company's servants; who, however, are bound to sell again to the Company what they have gained in this way of all spices, coffee, saltpetre, japan copper, and tin; the other articles they are allowed to dispose of as they please. TR.



are often therefore as ignorant of the world and of manners, as upon their wedding-day. It is not that they have no capacity to learn, but the men have no inclination to teach.

The men generally go dressed in the Dutch fashion, and often wear black.

As soon as you enter a house, where you intend to stop for an hour or more, you are desired by the master to make yourself comfortable by taking off some of your clothes, &c. This is done by laying aside the sword, pulling off the coat and wig (for most men wear wigs here), and substituting in the room of the last, a little white night-cap, which is generally carried in the pocket for that purpose.

When they go out on foot they are attended by a slave, who carries a sunshade (called here *sambreel*, or *payang*) over their heads; but whoever is lower in rank than a junior merchant may not have a slave behind him, but must carry a small sunshade himself.

Most of the white women, who are seen at Batavia, are born in the Indies. Those who come from Europe at a marriageable age, are very few in number. I shall therefore confine my observations to the former.

These are either the offspring of European mothers, or of oriental female slaves, who having first been mistresses to Europeans, have afterwards been married to them, and have been converted to Christianity, or at least have assumed the name of Christians.

The children produced by these marriages, may be known to the third and fourth generation, especially by the eyes, which are much smaller than in the unmixed progeny of Europeans.

There are likewise children who are the offspring of Portuguese, but these never become entirely white.

Children born in the Indies, are nick-named *Liplaps* by the Europeans, although both parents may have come from Europe.

Girls are commonly marriageable at twelve or thirteen years of age, and sometimes younger. It seldom happens, if they are but tolerably handsome, have any money, or any to expect, or are related to people in power, that they are unmarried after that age.

As they marry while they are yet children, it may easily be conceived, that they do not possess those requisites which enable a woman to manage a family with propriety. There are many of them who can neither read nor write, nor possess any ideas of religion, of morality, or of social intercourse.

Being married so young, they seldom get many children, and are old women at thirty years of age. Women of fifty in Europe look younger and fresher, than those of thirty at Batavia. They are, in general, of a very delicate make, and of an extreme fair complexion; but the tints of vermilion which embellish our northern ladies are wholly absent from their cheeks; the skin of the face and hands is of the most deadly pale white. Beauties must not be sought amongst them; the handsomest whom I saw would scarcely be thought middling pretty in Europe.

They have very supple joints, and can turn their fingers, hands, and arms, in almost every direction; but this they have in common with the women in the West Indies, and in other tropical climates.

They are commonly of a listless and lazy temper; but this ought chiefly to be ascribed to their education, and the number of slaves, of both sexes, that they always have to wait upon them.

They rise about half past seven, or eight o'clock, in the morning. They spend the forenoon

forenoon in playing and toying with their female slaves, whom they are never without, and in laughing and talking with them, while a few moments afterwards they will have the poor creatures whipped most unmercifully for the merest trifle. They loll, in a loose and airy dress, upon a sofa, or sit upon a low stool, or upon the ground, with their legs crossed under them. In the mean time, they do not omit the chewing of pinang, or betel, with which custom all the Indian women are infatuated: they likewise masticate the Java tobacco; this makes their spittle of a crimson colour, and when they have done it long they get a black border along their lips, their teeth become black, and their mouths are very disagreeable, though it is pretended that this use purifies the mouth, and preserves from the tooth-ache.

As the Indian women are really not deficient in powers of understanding, they would become very useful members of society, endearing wives, and good mothers, if they were but kept from familiarity with the slaves in their infancy, and educated under the immediate eye of their parents, who should be assiduous to inculcate, in their tender minds, the principles of true morality, and polished manners. But alas! the parents are far from taking such a burthenome task upon themselves. As soon as the child is born, they abandon it to the care of a female slave, who generally suckles it, and by whom it is reared till it attains the age of nine or ten years. These nurses are often but one remove above a brute, in point of intellect; and the little innocents imbibe with their milk all the prejudices and superstitious notions which disgrace the minds of their attendants, and which are never eradicated during the remainder of their lives, but seem to stamp them, rather with the character of the progeny of despicable slaves, than of a civilized race of beings.

They are remarkably fond of bathing and ablutions, and they make use of a large tub for this purpose, which holds three hogshheads of water, and in which they immerse their whole body, at least twice a week. Some of them do this, in the morning, in one of the running streams out of the city.

In common with most of the women in India they cherish a most excessive jealousy of their husbands, and of their female slaves. If they discover the smallest familiarity between them, they set no bounds to their thirst of revenge against these poor bondswomen, who in most cases have not dared to resist the will of their masters, for fear of ill-treatment.

They torture them in various ways; they have them whipped with rods, and beat with rattans, till they sink down before them, nearly exhausted: among other methods of tormenting them, they make the poor girls sit before them in such a posture that they can pinch them with their toes in a certain sensible part, which is the peculiar object of their vengeance, with such cruel ingenuity, that they faint away by the excess of pain.

I shall refrain from the recital of instances, which I have heard of the most refined cruelty practised upon these wretched victims of jealousy, by Indian women, and which have been related to me by witnesses worthy of belief; they are too repugnant to every feeling of humanity, and surpass the usual bounds of credibility.

Having thus satiated their anger upon their slaves, their next object is to take equal revenge upon their husbands, which they do in a manner less cruel, and more pleasant to themselves.

The warmth of the climate, which influences strongly upon their constitutions, together with the dissolute lives of the men before marriage, are the causes of much wantonness and dissipation among the women.

Marriages are always made at Batavia on Sundays, yet the bride never appears abroad before the following Wednesday evening, when she attends divine service; to be sooner seen in public would be a violation of the rules of decorum.

As soon as a woman becomes a widow, and the body of her husband is interred, which is generally done the day after his decease, if she be but rich she has immediately a number of suitors. A certain lady, who lost her husband while I was at Batavia, had in the fourth week of her widowhood a fourth lover, and at the end of three months she married again, and would have done it sooner if the laws had allowed of it.

Their dress is very light and airy; they have a piece of cotton cloth wrapped round the body, and fastened under the arms, next to the skin; over it they wear a shift, a jacket, and a chintz petticoat; which is all covered by a long gown, or kabay, as it is called, which hangs loose; the sleeves come down to the wrists, where they are fastened close with six or seven little gold or diamond buttons. When they go out in state, or to a company where they expect the presence of a lady of a counsellor of India, they put on a very fine muslin kabay, which is made like the other, but hangs down to the feet, while the first only reaches to the knees. When they invite each other, it is always with the condition of coming with the long or the short kabay. They all go with their heads uncovered; the hair, which is perfectly black, is worn in a wreath, fastened with gold and diamond hair-pins, which they call a *condé*\*: in the front and on the sides of the head, it is stroked smooth, and rendered shining by being anointed with cocoa-nut oil. They are particularly set upon this head-dress, and the girl who can dress their hair the most to their liking, is their chief favourite among their slaves. On Sundays they sometimes dress in the European style, with stays and other fashionable incumbrances, which however they do not like at all, being accustomed to a dress so much looser, and more pleasant, in this torrid clime.

When a lady goes out, she has usually four or more female slaves attending her, one of whom bears her betel-box. They are sumptuously adorned with gold and silver, and this ostentatious luxury the Indian ladies carry to a very great excess†.

They seldom mix in company with the men, except at marriage-feasts.

The title of My Lady is given exclusively to the wives of counsellors of India.

The ladies are very fond of riding through the streets of the town in their carriages, in the evening. Formerly, when Batavia was in a more flourishing condition, they were accompanied by musicians: but this is little customary at present, no more than rowing through the canals that intersect the town in little pleasure boats; and the going upon these parties, which were equally enlightened by music, was called *orang-bayen*.

When I came to Batavia, there was a theatre there; but it was given up before my departure.

The coaches used at Batavia are small and light. No one is restrained from keeping a carriage, but all are limited with respect to its decoration and painting. These are scrupulously regulated according to the respective ranks. Glass windows to coaches

\* The English travellers, who have visited Batavia, have all admired the taste of this head-dress, which they have thought inexpressibly elegant. When the ladies pay their evening visits to each other, the wreath of hair is surrounded by a chaplet of flowers, in which the grateful fragrance of the *nyctanthes sambac*, or Arabian jessamine, unites with the modest sweetness of the *polianthes tuberosa*, and is beautifully intermixed with the golden stars of the *mimusops elengi*. Tr.

† See the note in the foregoing chapter relative to the sumptuary regulations introduced at Batavia, of which this seems to be a notorious infraction. Tr.

are alone allowed to the members of the government, who have also the privilege of painting or gilding their carriages agreeable to their own taste.

It is ordained that a slave shall run before every wheel-carriage, with a stick in his hand, in order to give notice of its nearness, and prevent all accidents; for the streets not being paved, the approach of the carriage cannot be otherwise easily perceived.

A yearly tax is paid to the Company for keeping a carriage; but most people hire one, at the rate of sixty rix-dollars a month, of the licensed stable-keepers, by whom the duty is paid\*. Counsellors of India, and a few others of the Company's upper servants are exempted from it.

Sedan chairs are not in use here. The ladies, however, sometimes employ a conveyance that is somewhat like them, and is called a norimon. This is a kind of box, narrower at the top than the bottom, and carried by a thick bamboo pole fastened over the top. They sit in it, with their legs crossed under them, and have then just room enough to sit upright without being seen.

The carts drawn by buffaloes, which serve to convey goods inland, are of a very simple and no less clumsy construction. A long pole which serves for a beam, goes through an axle-tree, which turns two wheels, or rather round blocks like quoits, which are sawn out of the trunk of a thick tree, being about four feet in diameter, and having a round hole in the center through which the end of the axle-tree is inserted. At the farther end of the beam there is a cross piece of wood, of four or five feet in length, with four stout pegs, which is laid upon the shoulders of two buffaloes, in the manner of a yoke, so that their necks fit between the pegs, and this serves both to bear the weight of the cart and to drag it along. The carts themselves are small, and cannot carry a great weight; they have a covering made of leaves to preserve the load from the rain.

The trade of the Company, as we have before said, is managed by the director-general. The burthened duty of his office, is greatly alleviated by two assistants, who are senior merchants of the castle. Their business consists chiefly in superintending the housing in the Company's warehouses of all goods which are brought to Batavia by their ships, and the delivery of them again; all returns on this score are first made to them. The senior of them has the superintendence over all the goods that arrive, and the other over those that are dispatched. Deliveries are made on warrants signed by one of them. All papers relative to trade, which are received from the out-factories, are examined by them, and they report their contents to the director. They are both likewise administrators of the great treasury, but derive little emolument from it. Their office is one of the most troublesome of any in the Company's civil service at Batavia, and is not equally lucrative in comparison with others, to which less labour is attached, and whence much greater profits accrue; yet it is an office of much consideration, as it gives the precedence before all other senior merchants.

All merchandize is housed in the Company's repositories, which are situated partly in the city of Batavia, and partly on the island of Onrust, under the direction of administrators, or warehouse-keepers, who must render account of the same.

This branch of business is divided into several departments, each of which has two administrators, two commissaries, and a book-keeper. Some of these administratorships are very lucrative employments, especially that of the island Onrust, on account of the large quantities of goods which are laid up there. A certain per centage is allowed to

\* The annual tax paid by the stable keepers, is eighty rix-dollars if living within, and fifty if without, the city. On a former occasion, the different rates of the duty on carriages paid by different persons have been noticed. TR.

all the administrators, upon the whole of the goods which they deliver for waste, loss in weight, and damage, when the delivery is effected within a twelvemonth after the receipt; but when the goods have lain more than a year in the warehouses, the allowance is greater.

The occupation of the commissaries at the warehouses is, to take care that the Company suffer no prejudice at the receipt or delivery of goods. They are obliged to be present at the weighing of every thing, and to be attentive to the accuracy of the weight; an oath of fidelity in the discharge of their duty is administered to them annually by the council of justice.

The quantity of goods sent from Europe to India is inconsiderable, in comparison with those which are conveyed from one part of the Indies to another, or to Europe. The chief article of exportation to India is gold and silver, both bullion and coined\*.

CHAP. VI. — *A short Account of the Out-factories. — Amboyna. — Banda. — Ternate. — Macassar. — Timor. — Benjermaffing. — Malacca. — The north-east Coast of Java. — Coast of Coromandel. — Ceylon. — Bengal. — Surat. — Coast of Malabar. — West Coast of Sumatra. — Bantam. — Palembang. — Cheribon. — Trade to Japan. — To China. — Abandonment of several Factories, and Trading-places. — Decay of the Company's Trade in the West of India, chiefly owing to the Preponderance of the English. — Premiums to the Ship's Crews that return from India. — Decay of Batavia, by the Decrease of private Trade. — Unhealthiness of the Place. — Administration of the Province of Jaccatra. — Imports at Batavia. — The Island of Onrust. — De Kuiper. — Purmerend. — Edam.*

THE Company's possessions in India, are distinguished into those situated to the eastward, and those to the westward of Batavia. To the eastward, the government or province of Amboyna holds the first rank; to it belong the neighbouring islands, and part of the island of Ceram. The Company's servants appertaining to Amboyna, are in number about eight or nine hundred.

The only article of trade produced here is cloves; these are grown in such quantities, that the government at Batavia sometimes order a large number of clove-trees to be extirpated, and that no more than a certain fixed number shall be planted.

Thus, by a resolution of the year 1768, they ordered that the propagation of the clove-trees should cease till their number was reduced to five hundred and fifty thousand; the number of trees both young and fruit-bearing was then seven hundred and fifty-nine thousand and forty. In the year 1770, an extraordinary fine crop produced upwards of two million two hundred thousand pounds of cloves; each pound scarcely stands the Company in more than five stivers†.

Banda is the second government to the eastward. It consists of several small islands‡. The number of Europeans in garrison or otherwise in the service of the Company there does not much differ from that at Amboyna.

It

\* The annual exportation of the precious metals to India, by the Dutch East India Company, has been calculated at *f.* 6,000,000, or nearly 550,000*l.* Tr.

† On Mr. Stavrinus's second voyage he visited Amboyna, and has there, in book ii. given a very copious account of it. We refrain, therefore, from making any additions to his short notice of it in this chapter; and shall only enlarge on those settlements which he did not himself touch at, and of which he gives no further, or a very slight account. Tr.

‡ The province of Banda is about three or four weeks sail from Batavia; it consists of six small islands, which lie close to each other; upon Neira, which is situate in four degrees thirty minutes south latitude, stands the chief settlement of the province: it has a spacious and commodious harbour but very difficult to be entered; ships anchor under the cannon of two forts, called Belgica and Nassau; the first stands upon

It has little to fear from enemies, being as it were fortified by nature, and almost every where inaccessible, on account of its steep shores. The violent currents and narrow passages likewise make the navigation very dangerous \*. The Company's ships are obliged to be warped in with the assistance of many boats.

The produce consists in nutmegs and mace; the former stand the Company in about one and a quarter stiver per pound, and the latter in about nine stivers †.

The

upon an eminence, and commands the whole extent of the island and of the harbour, as well as fort Nassau; it would however at least require a garrison of four hundred men to be capable of defence, and the whole number of military in all the islands scarcely ever exceeds three hundred; the next island is that of Lonthoir, or Banda Proper. The residencies of Wayer and Cerien are on this island, and it has a fort and two or three redoubts; the third and fourth in importance are Puloway and Pulo-run, upon the first of which there is a small fort, and upon the other a redoubt, and these four islands are the only places where the cultivation of the nutmeg-tree is allowed by the Company; the other two are Rozingin, on which there is a redoubt, and to this island the Company often banish their state-prisoners; and Gunung-api, which has a volcano, constantly emitting smoke and often flames. To this government likewise belong several other islands in the neighbourhood, known by the appellations of the south eastern and south-western isles. Their inhabitants are in alliance with the Company, and furnish a considerable quantity of provisions, consisting of wild boars, itags, sea-cows, and other articles of food, which they barter at Neira for piece-goods and other necessaries. Their trade, however trifling, is of much benefit to the inhabitants of Banda; and it is supposed that the province would reap greater advantage from it, if the Company would allow Neira to become a more commercial place; but the suspicious policy of the government has always been directed to prevent the frequency of communication with the spice-islands, that as little opening might be left as possible for the prosecution of a clandestine trade, or for the knowledge of the situation, and state of defence of these possessions. TR.

\* The establishment at the isles of Banda consisted, in 1776 and 1777, of 55 persons in civil employments, 3 clergymen, 16 surgeons and assistants, 35 belonging to the artillery, 82 seamen and marines employed on shore, 283 soldiers, and 40 mechanics; in all 514 Europeans, besides 21 of the natives in the Company's service; yet the orders of the Company require that the garrison here should amount to 700 men. Besides the usual salaries, the Company allow their servants at Banda 5 per cent. on the sale of goods imported, and 7 per cent. surplus weight on the nutmegs collected;  $\frac{3}{8}$  of which emoluments belong to the governor,  $\frac{1}{8}$  to the second in command, and the rest is distributed by fixed portions among the other Company's servants; 6 per cent. is likewise allowed on the nutmegs, and 12 per cent. on the mace shipped off, for loss in weight by drying, crumbling, &c.; the profit accruing by which is divided equally between the governor and the warehouse-keepers; the governor has likewise an allowance of £240, or about 22l. per month, for table money. When the English Admiral Rainier took possession of the islands of Amboyna and Banda, in February and March 1796, the first, and indeed the only article of the capitulation was, that "the senior and junior officers of the civil establishment, the clergy, the military, and the marines should continue to receive their usual pay." Notwithstanding the natural means of defence of these islands, they fell an easy prey to the English; no resistance was made, either here or at Amboyna, nor was there a shot fired, or a man killed on either side. TR.

† This is nearly conformable to the prices stated by Abbé Raynal, who says that the Company paid nine stivers per pound for the mace, and one and an eighth for nutmegs; but the fact is, that the planters were formerly obliged to furnish all their spice to the Company upon pain of death for selling to any other, at 14 pennings, or  $\frac{2}{3}$  of a stiver for the sound nutmegs; half as much for those which were worm-eaten; 8 stivers  $\frac{1}{2}$  pennings for the mace, and half as much for the dull of mace; but in the year 1778 a violent hurricane having ruined most of the plantations, the price was advanced to 3  $\frac{1}{2}$  stivers for the nutmegs, and 10 stivers for the mace; the charges of shipping both articles are about one guilder per cwt.; and taking into calculation the per centages allowed on the weight, as before mentioned, the invoice value of each would be as follows:

1100lb. nutmegs, delivered by the planters.

70lb. for 7 per cent. allowed upon the collection

930lb. paid to the planters, at 3  $\frac{1}{2}$  st. per lb.

f.162. 15

56lb. for 6 per cent. allowed upon the shipment.

874lb. neat. Charges of shipping, f.1. per cwt.

- 8. 15

874lb. nutmegs, therefore, stood the Company in

- f.171. 10

or 15l.

The third government is that of Ternate, to which the island of Tidore is subordinate. The garrison is computed to amount altogether to seven hundred men. Ternate is not a subject of so much solicitude as the islands just mentioned, for all the spice-trees which it possessed, are extirpated, and no others may be planted in their stead\*.

This

or 15l. 11s. 10d. sterling, being about 4 $\frac{1}{2}$ d. per pound.	
1000lb. mace, paid to the planters, at 10 ft. per lb.	- f.500.
120lb. for 12 per cent. allowed upon the shipment.	
880lb. neat. Charges of shipping, f.1. per cwt.	- 8. 16
880lb. mace, therefore, stood the Company in	- f.508. 16
or 46l. 5s. sterling, being about 12 $\frac{1}{2}$ d. per pound.	

The real quantity of these precious spices, produced in the Banda isles, has never been exactly known. The largest quantity of nutmeg, sold by the East India Company in Holland, at one time, was 280,964lb. in the year 1737; in 1756, was sold 241,427lb.; and in 1778, 264,189lb.; the average has been taken at 250,000lb. annually, sold in Europe, at 35 shivers per pound, besides about 100,000lb. disposed of in the Indies, at no less a rate. Of mace, the average sold in Europe has been 90,000lb. annually, at f.6 per pound, and 10,000lb. in the Indies. Again, however, the amazing profits accruing upon these articles must be considered, the important expences of the establishment at Banda. Three large ships are dispatched thither every year from Java with rice and other necessaries. In the year 1779 the charges amounted to f.146,176, and the revenues proceeding from the duties on imports, &c. to f.9350, leaving a surplus in the charges of f.136,820, or about 12,440l. sterling; although the able and intelligent governor General Mossel, in his plan of reform of the Company's affairs in India, calculates that the revenues of Banda could be increased to f.90,000, taking, at the same time, the charges of the establishment at f.155,000. by which the ultimate expence would be reduced by one half. These islands, however, can never be expected to yield any advantage besides that derived from the spice-trade. Entirely cut off from all the other parts of India, and deprived of all commerce, save the trifling bartering trade we have noticed with the indigent natives of the south-eastern and south-western islands, they are even destitute of the means of subsistence for their own inhabitants, and must be supplied with every necessary from without. Nature, who has lavishly bestowed upon them articles of luxury and superfluity, has denied them those of indispensable necessity. Banda is likewise accounted a most unhealthy place, especially at the chief settlement of Neira. Some attribute this circumstance to the neighbourhood of the volcano, in the island of Gunung Api, and others to a deleterious quality in the water.

When Admiral Ramier took possession of Banda, he found in the treasury 66,675 sixdollars, and in store 84,777lb. nutmegs, and 19,587lb. mace. The English East India Company sold 30,000lb. nutmegs, and 25,000lb. mace at their last spring sale, which was the first public sale in England of these valuable articles. The

\* The province of Ternate includes the islands of Ternate, Tidore, Motir, Machian, and Bachian; which are what are properly the Moluccas; they are the original places of growth of the finer spices, and larger nutmegs are still found in the woods of Ternate, than any that are produced at Banda. On the island of Ternate, in one degree north latitude, is situate Fort Orange, which is the residence of the governor. The Spaniards had a footing in the Moluccas as late as the year 1663, at which period they abandoned their establishment at Gammalamma, which was formerly the residence of the Kings of Ternate; and the Dutch East India Company proving the strongest in their wars in 1680, with the confederated Kings of the Moluccas, the King of Ternate became tributary to them, and the Kings of the other islands were so far rendered dependent upon them, that, in the year 1778, upon suspicion of their having set some machinations on foot against the Company, the two powerful Kings of Tidore and Bachian were deposed, and sent in exile to Batavia, and their thrones given to other Princes, upon condition of their becoming the vassals of the Company. Some places, situated in the eastern part of the island Celebes, belong likewise to this government; the chief of them are Gorontalo and Manado; and the object of the Company in settling there, is principally to furnish provisions for Ternate, that part of Celebes being very fruitful in rice and other necessaries. They also yield a considerable quantity of gold, about 24,000 taels, of a dollar and a half in weight,



This province costs more to the Company than any profits that accrue from it. It is, however, of great importance, to defend the spice-islands, to which together with five or six other small islands it serves as a key. These are properly the Molucca islands."

A few years ago the English established themselves at a small island, not far distant from Ternate, which is called Sullock, but they abandoned it again in 1766.

The charges which the Company incur at Ternate amount to about one hundred and forty thousand guilders per annum, and the profits on the goods which are consumed among the natives, to sixty or seventy thousand\*.

This island suffered greatly in the month of August 1770 by earthquakes. More than sixty violent shocks were felt in the space of four-and-twenty hours, and the fortifications were much injured.

Macassar is the fourth government; it is situated on the island of Celebes, part of which is under the dominion of the Company, while they are in alliance with most of the native sovereigns of the remainder. The establishment here is equal to those of the before-mentioned governments. There are fortresses, which are dispersed over the island, to keep the natives in awe; but the chief power of the Company consists in the policy of fomenting the mutual jealousy of the Indian Princes, their allies, by which they are prevented from uniting, and are, in consequence, unable to undertake any thing against the Dutch.

The profits of the Company amounted in the year 1755 to eighty thousand, and their charges to one hundred and fifty-five thousand guilders.

weight, yearly, amounting, at 5*l.* per tael, to 120,000*l.* and of culent birds' nests, which are esteemed a great delicacy by the orientals, and especially by the Chinese, in exchange for which the inhabitants take opium, Indostan piece-goods, chiefly blue cloth, fine Bengal coffees and hummums, together with some cutlery. Ternate does not, in general, require any supply of provisions from Java as the isles of Banda do. Some have given as a reason for this difference, that from the commencement of the dominion of the Dutch in the Molucca islands, the lives of the inhabitants have been spared; whereas in Banda they were all exterminated under the pretence that they were a peridious nation upon whose engagements no dependance could be placed: and now that the cultivation of the soil there has fallen into the hands of a mixture of Europeans and Indians, either as proprietors or lessees of the spice plantations, they have not been able to attend to the propagation of rice or other articles of food. In 1776-1777 the establishment of Ternate consisted of 59 persons in civil employments, 3 in ecclesiastical situations, 10 surgeons and assistants, 38 belonging to the artillery, 214 seamen and marines employed on shore, 456 soldiers, and 67 mechanics, in all 847. In addition to his salary the governor has a yearly allowance of 5,240*l.* or about 220*l.* sterling, for the expence of entertaining the native princes; the governor and the second in command have 5 per cent. divided equally between them on the sale of all goods imported; and 1 per cent. is allowed on the collection of gold, to be divided between the governor and the collector. Tr.

\* The Company pay a yearly sum of 5,32,250*l.* or nearly 300*l.* sterling to the Kings of the Moluccas, in consideration of which they engage to destroy all the spice-trees, which are dispersed through the woods of their extensive islands, and detachments of Europeans are sent out from time to time to see that this extirpation be duly executed. The Company do not retain possession of the Moluccas on account of their intrinsic value, but for political reasons, in order to keep other nations from the neighbourhood of Amboyna and Banda, to the security of which the possession of Ternate was supposed greatly to contribute. The expences of government at the Moluccas, were calculated by the governor General Mossel at 5,14,450*l.* per annum, and the revenues at 5,90,000*l.*; but in 1779, after the revolution mentioned in a preceding note, the former were found to amount to 5,229,406*l.* and the latter to 5,114,997*l.* leaving a deficit of 5,114,409*l.* or about 10,400*l.* sterling, which is a large sum, when we consider that the mother-country derives no advantage from this settlement; for the profits on the gold and birds' nests beforementioned are consumed in India, and scarcely suffice to make good the charge of sending a ship thither, as is done every year from Batavia, with stores and necessaries for the government. Tr.

Slaves and rice are the chief objects of traffic here; but the establishment is likewise considered of great importance, for the security of the Moluccas and the spice-islands.

Upon the island of Timor, part of which belongs to the Portuguese, and part to the Dutch, the Company have a small settlement, the profits and expences of which are nearly equal †.

At Banjermassing, situated on the south side of the great island of Borneo, the charges and revenues are equally nearly upon a par. Its chief product is pepper ‡.

Malacca

\* See the further ample account of the settlement at Macassar, in Mr. Stavorus's Second Voyage. TR.

† Timor is an island lying in the direction of north-east between eight degrees forty minutes and ten degrees thirty minutes, south latitude; the Dutch settlement is at a fort called Coupang at the south-west part of it, in latitude ten degrees twelve minutes south, and in longitude, according to the Dutch charts, one hundred and twenty-one degrees fifty-one minutes east, but according to Captain Bligh, in one hundred and twenty-four degrees forty-one minutes east. The chief of the settlement has the rank of merchant, with an additional salary of *f*.2000, and the establishment consisted in 1776 1777 of ten persons in civil, and two in ecclesiastical employments, two surgeons, five belonging to the artillery, eight marines, forty soldiers, and three mechanics, in all seventy Europeans. The north east and south sides of the island belong to the Dutch, whose governor has equally the controul over the neighbouring small islands of Rotti, Savu, and some others, which are governed by their own native Princes, but who are dependent of the Company, and pay yearly acknowledgments of small value, consisting principally in wax, which is the chief article produced in their domains. The Portuguese have a small factory, called Liffau, on the north side of Timor. The charges of the Dutch establishment here amounted in 1779 to *f*.11,712, and the receipts to *f* 13,619. And upon the whole, they have been computed to be nearly upon a par. Timor furnishes a number of slaves for private use, who are of a pliant disposition and temper, and are much employed at Banda in the cultivation and preparation of nutmegs and mace. The Company likewise receive from Timor a considerable quantity of sandal-wood, and bees-wax (though the former article is now scarce), in exchange for piece-goods, on the sale of which five per cent. is allowed, in equal proportions, to the two first officers; the profits on this little trade are more than adequate to make good the charges of the ship, which is annually dispatched from Batavia, for the purposes of fetching them, and of carrying a cargo of necessaries to the government. TR.

‡ The factory at Banjermassing lies in three degrees south latitude. There is a small fort, where a junior merchant as resident, with about twenty-five or thirty soldiers are stationed. The object of this establishment is chiefly the collection or purchase of the pepper and rough diamonds produced in the country. Five per cent. on the pepper collected is allowed to the resident. The contract entered into with the King obliges him to deliver 600,000 pounds, at three shillings per pound; and this is the only article which induces the Company to retain this possession, for the profits on the rough diamonds, gold, wax, canes, and sago, would not be sufficient to make good the charges. The respective qualities of these latter articles are also so inferior that the trade of the Company in them is confined to a mere trifle. The circumjacent Indian nations, and the Chinese, carry on a great trade with Borneo. The English have some establishments on the north coast of Borneo, but their settlement at Balambangan was destroyed in 1775, by the Soloos, and we know not whether it has been re-established. They have endeavoured to rear the nutmeg at these places. They succeeded tolerably in the beginning, but either their plants have degenerated, or they had not originally the genuine kind, for the nutmegs they now produce are much less in value than those which are grown at Banda, and are, in fact, what are called wild nutmegs, being of an oblong shape, and a less spicy nature than the true ones. Banjermassing is of no importance to the Company as a source of revenue, for they do not possess a foot of land without their fort, and are obliged to be constantly on their guard against the insidious attacks of the natives; though in 1769 an order, which was made in 1754, for all captains of vessels going thither, "not to land all the cash they had on board for the factory at one time," was withdrawn; the fort being then thought sufficiently strong to withstand any assault of the Indians. The charges of this establishment were, in 1779, *f* 1200, about 1100l sterling, which, together with those of conveying the pepper to Batavia, are scarcely covered by the profits accruing on this scanty trade.

Landak and Succadana are possessions which the Dutch Company have obtained in Borneo, by grant from the King of Bantam, to whose crown they were appendages, being provinces formerly conquered by the Bantamese; in the year 1778 he ceded the entire property of them to the Company, who immediately sent a ship from Batavia, with an adequate force to take possession of them and enter into a treaty with the Sultan of the country. Both these objects having succeeded, the Company settled themselves

Malacca is the fifth government, and a place of great importance, for it commands the passage through the straits of that name to the eastern parts of Asia, as all ships going to China, Tonquin, Siam, the Molucca, and Sunda islands, must either pass by here, or else through the straits of Sunda; both which passages can be blocked up, by means of the Company's possessions. The whole establishment at Malacca is computed to amount to five hundred men\*. The revenues and charges of the government are each about one hundred thousand gilders†.

The sixth government in order is that of the North-east Coast of Java; the head of which generally resides at Samarang. The Company draw almost all their rice and timber from this province. All the sea-ports along this coast, as far as Cheribon, where chiefs or residents are stationed by the Company, belong to it. This is said to be at present the most lucrative of all the governments in India‡.

The seventh is that of the coast of Coromandel. Besides the head settlement, Negapatnam ||, all the Company's other factories along this coast belong to it. These are Sadraspatnam,

selves in a small fort, called Puntiana, situated on a river of the name of Laya. The establishment, as may be conceived, is not large, it remaining yet to be proved whether the commerce that may be carried on here, will answer the expence. Between thirty and forty men are garrisoned here; and in 1779 the charges amounted to £9726, about 884*l.* and the profits which had then been made upon the sale of piece-goods, and other trifles, were no more than £1764, about 160*l.* but hopes have been entertained that these places will in future be of great advantage to the Company, grounded upon the various articles of trade which Borneo is known to produce, namely rough diamonds, camphor, benzoin, canes, iron, copper, bezoar, sago, wax, bird's nests, gold, &c. Yet, taking into consideration the propensity of the Borneans to theft, and to illicit trade, as well as that several of the above productions are not to be met with within twenty days' journey up the country, it may well be doubted whether any benefit can be speedily or ultimately derived from these settlements. Tr.

\* In 1776-1777 the establishment at Malacca consisted of 39 persons in civil, and 3 in ecclesiastical employments, 7 surgeons and assistants, 16 belonging to the artillery, 129 seamen and marines, 262 soldiers, and 43 mechanics, in all 499 Europeans. This city is situated in three degrees ten minutes north latitude, and was taken from the Portuguese by the Dutch in 1640, after a most obstinate defence. It is represented as a strong place. It was taken possession of by the English in August 1795.

† Governor Mossel stated the charges of this settlement in his time at £102,000, and the revenues at £89,000 per annum; in 1779, however, the former amounted to £113,235, and the latter to £162,520, leaving a balance in favour of the colony of £49,285, or about 4480*l.* sterling. This revenue proceeds from the duties laid on imports and exports, a great trade being carried on here by the Indians, and free European merchants of all nations, and from the profits on the goods vended by the Company. Of the export-duty of 6 per cent. one fourth is allowed, as a perquisite, to the Company's servants, of which the governor has 40 per cent., the second in command 15, and the rest is distributed, in different proportions, to the inferior officers. The governor has also an allowance of one gilder, about 18. 9*d.* per picol, on all the tin collected. A large quantity of this article, three or four hundred thousand pounds weight, is purchased here every year, at about £30 per hundred pound, equal to about 56*s.* sterling per hundred weight, which is generally disposed of in Asia. In 1778, however, one hundred thousand pounds was sold in Holland at £40 per hundred pounds. This settlement likewise yields some gold, areca, brimstone, and rosin, together with very good masts, for the small vessels which are built at Rembang and at the island Onrust. Upon all these the profits are not inconsiderable, as the whole of these articles are in great request throughout the Indies. The commissioners for the trade on both sides of the strait have five per cent. on all purchases and sales, and one per cent. on the gold they collect, out of which they must defray their own travelling expences. The territorial extent of this government is not very great; it is confined to the city of Malacca, and the neighbouring small province of Pera, where the Company have a fort for protecting the collection of the tin, which is dug there. In 1783 Rio, or Riow, situated near Malacca, which was the resort of a notorious nest of smugglers, was subdued by Commodore Van Braam, and has since been added to the jurisdiction of Malacca. Tr.

‡ We refer the reader to the second voyage of Mr. Stavorinus, for particulars respecting the Dutch settlements along the north-east coast of Java. Tr.

|| Negapatnam is a strong fortress and walled town in the kingdom of Tanjore, and eleven degrees north latitude. It was formerly the chief settlement of the Dutch on this coast, and cost them much money in maintaining

Sadraspatnam, Palicol, Jagernakpouram, and Bemelipatnam \*. The articles of trade which it furnishes, are all sorts of cotton piece-goods.

Ceylon is the eighth government, to which likewise belongs Madura, situate on the opposite shore †.

This

maintaining the garrison and fortifications. In the war of 1780, it was however taken by the English, and ceded to them by the treaty of peace in 1783. The statements adduced below, both of the establishment on the coast, and of the revenues and expences, are taken from dates preceding this event; none subsequent to it have been attainable; nor has it been possible to ascertain the specific proportion of Negapatnam in either: so that greater uncertainty must prevail on this subject than in any of our other additions. T<sub>R</sub>.

\* Our author here omits the settlement of Palliacatta, where the Dutch established themselves as early as 1609, when they built a square fort, called Geldria, and whither, since the loss of Negapatnam, the chief government of their settlements on the coast has been transposed. The fort is in thirteen degrees thirty minutes north latitude, the city which adjoins to it lies in the dominions of the Nabob of Arcot. The trade here, and indeed all along the Coromandel coast, in arrack, sugar, Japan copper, spices, and other articles, brought from Batavia, is very brisk. Sadraspatnam is a town equally in the dominions of the Nabob of Arcot, from whom the Company have farmed it; they have a fortified lodge here, and have frequented this place since 1647: it lies in twelve degrees forty minutes north. Palicol is a village belonging to the Company, in sixteen degrees forty minutes north, and in the country of Narsapore; together with the two following places, it is situated in the kingdom of Golconda. Jagernakpouram, lies in seventeen degrees twenty minutes north: the territory upon which it stands, together with the factory at Daatjerom, and two villages near it, which are used for the bleaching of calicoes and other piece-goods, are the property of the Company; the factory is defended by ramparts of earth. Bemelipatnam, the north latitude of which is nearly eighteen degrees, is a place which the Company hold in farm; they have a new fort here, and the road before it, as well as that at Jagernakpouram, is practicable from December to September. The Dutch Company likewise carry on a considerable trade at Masulipatnam, and they have a resident at Porto Novo, which is under the Nabob of Arcot for the purchase of cottons, on which they pay an export duty of one per cent. In 1776-1777, their establishment on the coast of Coromandel consisted of one thousand one hundred and seventy-five Europeans: namely, one hundred and forty-two in civil, and nine in ecclesiastical employments; fourteen surgeons and assistants; seventy-nine belonging to the artillery; one hundred and eighty-four seamen and marines, employed on shore; seven hundred and thirty-six soldiers, and eleven mechanics, besides one hundred and thirty-seven natives. The revenues and the profits on the merchandize disposed of, amounted in 1779, for all these settlements, Negapatnam included, to *f*.427,131, and the charges to *f*.452,133. The intelligent Mossel, who was particularly acquainted with the local circumstances of this coast, as he was five years governor of the Company's Coromandel settlements, calculated that the former might be made to amount to *f*.520,000, and the latter reduced to *f*.260,000. One or two ships are annually dispatched direct to Europe, with piece-goods, and caliatour-wood, the rest go first to Batavia. The value of the piece-goods sold in 1778 in Holland, was *f*.2,000,000, about 181,818*l*. sterling; and of caliatour-wood 200,000 pounds were sold at *f*.20 per 100 pounds. It is computed that twenty-five per cent. is gained on both articles. The whole of the Dutch settlements on this coast are now in possession of the English. T<sub>R</sub>.

† Ceylon lies between six degrees and nine and a half degrees north. The struggles between the Dutch and Portuguese for this island lasted from 1638 to 1655, in which last year the latter were entirely driven from it, by the loss of Colombo. This place, which is well fortified, is the chief settlement, and the residence of the governor; it is situated on the west side of the island, and at the broadest part of it. Candy, the metropolis of the island, and the seat of the emperor, lies about sixteen Dutch miles inland from Colombo; it was taken in 1764 by the Dutch, but restored to the emperor by the subsequent peace. The district of Colombo extends about twenty leagues in length, and eight in breadth; it abounds in cinnamon groves and rice fields, black cattle and poultry, and is very populous. There is a seminary at Colombo, for the propagation of the Christian religion; and it is computed, that there are three hundred thousand native Christians in Ceylon. The road of Colombo is unsafe, and only practicable for a few months in the year. Five leagues north of Colombo is Negombo, a fortress of less consideration, but the cinnamon produced in its district is the best of the island; it likewise yields a large quantity of coir for cordage. Jaffnapatnam is a place of consequence, strongly fortified, lying opposite to and not far from the continent of Indostan; it is the capital of what was formerly a kingdom, nearly sixty leagues in circumference; elephants form the only object of trade of this country for the Company; this, however, yields

The Company's possessions on the coast of Malabar are under a commandant. The chief produce is pepper, which is esteemed the best of all India \*.

From the west coast of Sumatra are brought gold, camphor, and pepper †.

Bantam is a commandery from which the Company draw the greatest quantity of pepper.

On the inner, or eastern coast of Sumatra, they have a settlement at Palembang, whence they receive pepper and tin ‡.

Most

\* Mr. Stavorus enlarges respecting Bengal, in the next book; respecting Surat in the 2d and 3d books of his second voyage; and respecting the coast of Malabar, in the 13th and 14th chapters of the 4th book. TR.

† Besides Lampon, which has been mentioned among the dependencies of Bantam, the Dutch have a settlement at Padang, on the west coast of Sumatra, to which the factories at Pulo Chincio, Priamam, and Adgerhadja are subordinate. At Padang there is a fort, with a garrison of fifty or sixty men, and the chief of the settlement has the rank of merchant. Some pepper, camphor, and benzoin are furnished from this coast, but ever since the establishment of the English settlement at Bencoolen in this neighbourhood, the Dutch complain that pepper is procured in very small quantities; they, however, likewise collect and export annually to Batavia, about two thousand five hundred tials of gold, the quantity never exceeds three thousand tials, nor falls short of two; a tial is twenty-six pennyweights twelve grains; the purchase price is high, being nearly 3l. 5s. sterling, per ounce. There is a vein of gold which runs close to Padang, and some years ago it was worked, but not finding returns adequate to the expence, the Company let it to farm, and, in a few years, it fell into such low repute as to be disposed of at a rent of two Spanish dollars, by public auction. In 1779 the books of Padang shewed a balance in favour of the establishment of *f*.20,902, about 1900l. sterling, the charges being *f*.53,675, and on the other hand, the profits accruing on the sale of piece-goods, salt, &c. *f*.74,577; which is sufficient to defray the expence of sending a ship thither annually from Batavia, with necessaries for the settlement. Padang and its dependencies are, at present, in the hands of the English. The whole establishment of the Dutch on the west coast of Sumatra, including Lampon, was, in 1776-1777, thirty persons in civil employments, five surgeons and assistants, two belonging to the artillery, thirteen marines, one hundred and four soldiers, and twenty-one mechanics; in all, one hundred and seventy-five Europeans, besides ninety-seven natives in the service of the Company. TR.

‡ Palembang lies about ten or twelve days sail from Batavia. The dominions of the King of Palembang are extensive; they reach as far as the hills of Lampon to the southward, and comprehend the island of Banca, which lies opposite to the river of Palembang. This island is celebrated throughout Asia for the same cause, its tin-mines, to which England owed its celebrity in Europe, in very ancient times, before its arts and arms had spread its fame around the globe. The tin-mines in Banca, which were first discovered in 1710 or 1711, have yielded immense quantities of ore, and appear inexhaustible. There are seven chief places where it is dug, which are under the direction of Chinese managers, who provide and pay for the labour of the miners, who are also, in general, of that nation. The tin is delivered by these chiefs to the King of Palembang, for five rix-dollars per one hundred and twenty-five pounds, and by him to the Dutch for fifteen rix-dollars, equal to about 58s. sterling per hundred weight English. The Company do not, however, always take all that is brought; for in 1770 the government at Batavia resolved, "not to receive more than twenty-five thousand picols of one hundred and twenty-five pounds each, from Palembang every year, and as 5000 picols more had been delivered that year, no more than twenty thousand should be accepted in the next, of which due notice should be given to the King." And yet the Dutch endeavour to prevent the tin from being disposed of to any others, and keep vessels continually cruising along the shores to prevent the smuggling of it; but their vigilance is eluded, and the commerce is largely participated by private adventurers. Raynal and others state the quantity of tin received by the Dutch Company at two million pounds; but from the above it appears, that they take at least three million pounds. But very little of it comes to Europe; in 1778, seven hundred thousand pounds were sold in Holland at *f* 42 per hundred pounds; the greatest part goes to the China market, where it is preferred to European tin, and the profit upon it is supposed by a late intelligent traveller, Sir George Staunton, not to be less any year than 150,000l. sterling, though, by the Dutch account of their China trade, which is given a little farther on, this seems to be an extravagant computation. The King is under strict engagements to the Dutch, to allow them an exclusive trade throughout his dominions, and to deliver all the tin and pepper produced in them at Batavia, sending them thither in his own ships, and at his own expence. The quantity of pepper brought annually from Palembang is about two million pounds, which is purchased at the rate of two stivers per pound. The Company likewise take about one thousand carats of rough diamonds, and a considerable quantity of canes and rattans. Very few goods are given in exchange

Most of the coffee sold by the Company is brought from their settlement at Cheribon in Java.

One of their most advantageous branches of commerce is that which they carry on to Japan; they send one or two ships thither every year, and are admitted to trade there exclusively of all other nations, the Chinese alone excepted.

A small island called Decima, in the harbour of Nangafakki, has been ceded to them; and the merchandise they import is landed and housed there\*.

This trade is confided to a chief, who is sent out from Batavia every two years.

The charges of this establishment amount to full one hundred thousand gilders every year; the half of which is the value of the annual presents to the Emperor of Japan†.

The principal articles that are shipped to Japan are tortoise-shells, Baros camphor from Sumatra and Borneo, Dutch woollens, and sugar; in return for which we receive Japan camphor, copper, china, and lacquered ware‡.

The trade to China generally employs four ships every year; these are dispatched directly from Holland, and only touch at Batavia, in going out, in order to take in a cargo of Banca tin, which is disposed of to much advantage in China: but when they return to Europe they only anchor at North Island, not far from the straits of Sunda,

change for these articles, and a large sum in specie is yearly required to balance with the King. In 1779 the profit on the few things disposed of at Palambang amounted only to *f*.2922, and the charges of the settlement were *f*.49,677, making it stand the Company for one year in *f*.45,755, or about 416*l*. sterling. In 1771 they rebuilt their old ruinous fort, in a pentagonal form, and the cost of the new one was computed to be *f*80,540, about 7322*l*. sterling. The establishment here consisted, in 1776-1777, of one hundred and fifteen Europeans, viz. six in their civil service, one clergyman, two surgeons, sixty-one seamen and marines, twenty-nine soldiers, and sixteen mechanics. TR.

\* Decima is situated in forty-two degrees north latitude. The voyage from Batavia to Japan generally lasts about thirty days. The navigation is very dangerous, and the Dutch have, for the last hundred years, lost one out of every five ships that go thither. For an account of the excessive jealousy and suspicion of the Japanese, and their treatment both of the Dutch and of the Chinese, as well as of numerous other particulars relative to Japan, and before little known in Europe, the reader cannot be better referred than to the ample and curious relations to be found in the third and fourth volumes of Dr. Thunberg's Travels. TR.

† The Company have only about ten or twelve of their servants resident in Japan. The charges amounted, in 1779, to *f*.96,356; the greatest part whereof consists, as above, of presents to the Emperor, and the expences of the journey undertaken yearly to Jedo, for the offering of them: on the other hand, the profits arising from the sale of goods were *f*.106,802, leaving a surplus of full *f*.10,000, or nearly 100*l*. sterling; so that nothing remains to be deducted from the profits on the returns (for which see the next note) but the expences of the ships sent, and the calculated loss, as before mentioned, of one vessel in five. TR.

‡ The two ships which go yearly to Japan, usually take the value of *f*.500,000, about 45,450*l*. in sugar, Japan-wood, elephants' teeth, tortoise-shell, camphor, tin, lead, quicksilver, chintzes, cottons, Dutch woollens, vermilion, wax, cloves, nutmegs, pepper, China root, and some silver in ducatoons. Their returns consist, for the greatest part, in Japan copper, which is in small bars of about six inches long, and about one third of a pound in weight; of these they receive eight or nine thousand boxes, each containing one hundred and twenty-five pounds, which they pay at the rate of *f*.11 per box, and dispose of it in Bengal, at Surat, and on the coasts of Coromandel and Malabar, for *f*.90, and *f*.91: they likewise take about fifty thousand pounds of Japan camphor, two-fifths of which is retailed in India, and the rest comes to Europe; and also a trifling amount in soy, china, lacquered ware, and large silk night-gowns. The private trade of the Dutch officers and ships' crews to Japan is also very considerable, as well as profitable; they carry out camphor, China root, saffron, Venice treacle, Spanish liquorice, rattans, spectacles, looking-glasses, watches, manufactured glass, and unicorns' horns (the horn of the *monodon monoceros*); and receive in return soy silks, silk night-gowns, china, lacquered ware, fans, and fine rice. TR.

to take in water, without touching at Batavia. The time when they set sail from Batavia for China is generally about the beginning of July\*.

The Company used formerly to trade to Cochin-China, Tonquin, Siam, Pegu, Aracan, Persia, and Mocha; but they have now abandoned all commerce with these places. Their connections are, at present, limited to those I have before shortly noticed: and among these there are several which, in my opinion, are more prejudicial than advantageous to the Company, especially those in the west of India; which must be ascribed to a change of times, and of circumstances.

When the Company established their commerce in those parts, their rivals were very inconsiderable; the English were not a match for them, and the Indian Princes traded rather with the Dutch than with their neighbours. But this is now entirely altered.

The English, who did not then come into any consideration, are now as strong, and perhaps stronger, in the west of India, than the Dutch Company are in the east. They have prescribed laws to the Emperor of Indostan, and are, in consequence, masters of the whole trade of his dominions, especially at Surat and in Bengal, where the Company used to make important profits, both by the goods which they imported, and those which they exported.

If the sea-risk, the ships' charges, and the interest of the money employed, were accurately computed, their present gains would, perhaps, be found to be extremely trifling.

\* The Dutch factory at Canton is not, like all their other settlements and places of trade in India, subordinate to the government at Batavia, but has, for upwards of forty years, been under the management of a special committee or directors in Holland; yet every thing relative to it, is communicated to and transacted in concert with the government at Batavia. The cargoes of the four or five ships which the Dutch send annually to China amount in value to *f*.2,400,000, or *f*.2,500,000, about 225,000*l*. sterling, one half of which consists in silver, either in bars or Spanish dollars, and the other half in tin, lead, pepper, cloves, and nutmegs, upon which articles a profit of at least *f*.660,000, about 60,000*l*. sterling is made. For the above capital the Company's agents purchase between four and five million pounds of tea, of all sorts, and a quantity of silks, nankeens, china, turmeric, &c. We subjoin a list of the quantities of tea exported in Dutch ships from China, for the twenty years between 1776 and 1795:

Years.	Ships.	Pounds of Tea.
1776	5	4,923,700.
1777	4	4,856,500.
1778	4	4,695,700.
1779	4	4,553,100.
1780	4	4,687,800.
1781	4	4,957,600.
1782	} none, on account of the war.	
1783		
1784		
1785	4	5,334,000.
1786	4	4,458,800.
1787	5	5,943,200.
1788	5	5,794,900.
1789	4	4,179,600.
1790	5	5,106,900.
1791	3	1,328,500.
1792	2	2,051,330.
1793	3	2,938,530.
1794	2	2,417,200.
1795	4	4,096,800.

Tr.

Not



Not only the English but almost all the naval powers of Europe have, at present, ships trading to the Indies, and establishments of more or less consequence in the western parts.

The trade in piece-goods which, in former times, produced such considerable benefit to the Company, is now almost entirely in the hands of the English; at least they are very detrimental to the portion of it that still remains with us, by their competition for purchases.

I shall not say any thing of the honesty and fidelity of the Company's chiefs at their out-factories, that is out of the line I propose following; when I was in Bengal, I had an opportunity of observing some instances, not very consonant with the above virtues; and it is not many years ago that the Company had proofs of the like, in the government of the Coromandel coast.

On the other hand, the number of officers, and their appointments, remain the same; and a numerous body of useless placemen, and too many military, are maintained by the Company.

If the trade in Bengal, at Surat, and on the coast of Coromandel were reduced to the same regulations as that of China and Japan; and if, instead of expensive fortifications, trading-houses, or factories, were only retained, the profits which are actually made, would remain, and the present charges would be amazingly diminished. It cannot, in my opinion, be of any real advantage to the Company, that they pretend to appear as a sovereign state, where they have not an exclusive trade, and where they cannot interdict the trade of every other nation. At Ceylon, Java, and the other islands in the eastern parts, where they have the territorial property, and the sovereign power, it is necessary both to display and to maintain their dominion; for there they can, and justly, dispute the right of all others, whether authorized traders or interlopers; but it is money thrown away to pretend to make a shew of sovereignty at the before-mentioned places, for it augments neither their commerce nor their resources.

The goods which they carry thither, and which cannot be furnished by any other nation, the Dutch being the sole dealers in them, such as the finer spices, and Japan copper, are of a nature which renders them indispensable in the west of India. Their ships laden with these articles, would be, with pleasure, successively received, and they would speedily and gladly be bartered for cargoes of other commodities.

Moreover, there would be the advantage, that the conductors, having to superintend a less extensive concern, would the better be enabled to discover and reform all errors and abuses: whereas the extent of the object under their controul affords, at present, innumerable openings for misconduct and mistakes, which undermine the whole superstructure.

The English have not only been very prejudicial to the trade of the Company in the west of India, but have also endeavoured, if not to supplant them in the entire possession of Ceylon, at least to participate in the advantages of that rich island.

At the time of the last war in Ceylon, when the Company had blocked up all the harbours with their ships, and the Emperor was nearly reduced to be besieged in his capital, the English sent an ambassador from Madras to the Emperor, with an offer of assistance to expel the Dutch from his dominions, for which purpose they would provide a large number of ships. But their own pertinacity was the reason that the alliance was not formed in time; for the ambassador would not comply with the oriental custom of address, which is especially prevalent in Ceylon, and to which the Dutch were used to conform; that is, he refused to prostrate himself upon the ground, or fall upon his knees, when he was first introduced into the presence of the Emperor.

Several weeks thus elapsed before he had an audience ; and in the mean time, matters had taken a still more decided aspect in our favour, so that the clandestine attempts of our secret enemies were, in this instance, frustrated.

I was exceedingly surprized when I saw at Batavia, that, although the trade in piece-goods, and in opium, was prohibited to private individuals of our own nation, the English were not only allowed to bring whole cargoes to Batavia, and to dispose of them there, but were facilitated in every respect in the disposal. These indulgences were not confined to the above, but were extended to all sorts of commodities, both Indian and European, to the great detriment of our own ships' officers and crews, who were not allowed to import their wares ; and they who did bring some privileged goods were forced to sell them at a loss, on account of the glut occasioned by the quantities imported by the English. The exportation of sugar too was likewise prohibited to our own people, but the English were furnished with as much as they asked for, out of the Company's warehouses. Their ships, upon paying for the work done, were allowed to be repaired by the Company's servants at the island Onrust. In August 1769 I saw eight English ships, lying at that island, and three more in the roads of Batavia. In the following year, however, the government seemed, in some measure, to have a different opinion ; for they then restricted the English to the taking in of water and wood, which every one hoped might be of long continuance.

The Company have another object of expence, since the year 1742, which did not perhaps then appear in so detrimental a light as at present. I mean the premiums which are given to the ships' crews returning home, and which were allowed as an indemnification for the articles of trade, which, before that time, they were permitted to bring home with them from India ; but this was so much abused, that the Company's ships were crammed with the private property of the crews, in so far that now and then a ship was lost in consequence of being too deeply laden.

In how far, by putting a stop to this private trade, such accidents have in reality been prevented, may be best seen by comparing the number of the ships lost for thirty years before the year 1742, with those lost since. For my own part, I believe, that very little difference would be found. It is of course, that the vessels lost in Table Bay, or other roads, which cannot be attributed to overloading, must not be taken into the account. The Company have already expended the sum of eighteen millions of gilders in these premiums, as will appear from the rough calculation subjoined, in which I have taken rather too little than too much.

The premiums for every ship returning home (estimating the crews, one with another, at one hundred and twenty hands for each ship) amount to full *f*.18,000, as follows :

1	Captain receives for premium	-	-	<i>f</i> .2000
1	Captain's mate	-	-	500
1	Second mate	-	-	400
1	Surgeon	-	-	400
2	Other mates, <i>f</i> .300 each	-	-	600
1	Chaplain	-	-	300
20	Under officers, one with another <i>f</i> .200 each	-	-	4000
24	Seamen, earning upwards of <i>f</i> .10, monthly wages, <i>f</i> .150 each	-	-	3600
66	'Ditto, and boys, under <i>f</i> .10, <i>f</i> .100 each	-	-	6600
<hr/>				
117 Men				<i>f</i> .18,400

3 Supposed

117 Brought forward	-	-	f.18,400
3 Supposed to have died on the other side of the Cape of Good Hope, who receive nothing			
120 Men			
So that every ship's crew receive for premiums			f.18,400
Which, however, in order to make a round sum, I only take at	-	-	f.18,000
And computing that since the year 1742, twenty-five ships have annually returned from India, consider- ing one year with another, the whole amount in premiums for one year is	-	-	f.450,000
Since the navigation has been put upon this footing, that is, from 1742 to 1771, twenty-nine years have elapsed; so that during that period the Com- pany have paid premiums to the amount of			f.13,050,000
The interest of this capital for twenty-seven years, at three per cent. per annum, which is annually augmented by f.13,500, amounts to *			f.5,103,000
So that the Company have lost a sum, for which they have no adequate benefit, of			f.18,153,000

May not the decay of Batavia, whose chief support is the free trade of its inhabitants, be in some measure likewise ascribed to this cause? People well worthy of credit, who have lived for forty years and more at Batavia, have assured me that there is an inconceivable difference between the actual state of the city, with respect to trade, and its flourishing situation before the year 1740. Free inhabitants, who had never been in the service of the Company, used then to return to Europe laden with riches, very few instances of which occur at present. Here in Holland, we may in consequence plainly perceive, that there is little chance of making money at present at Batavia by private trade, and it is well known that it grows worse from day to day.

It is true, that the Company at home are unable to reform all the abuses which have crept in from time to time in such an extent of territory, as they possess in the Indies; but they are too well acquainted with the actual state of Batavia; and the prosperity or decay of that city, which is the centre, and as it were the pivot of all their possessions, is of too great and real importance to their interests, than that they ought not to endeavour to raise it out of that languid state into which it is progressively falling.

Another thing which is a great drawback upon the prosperity of Batavia, is the unhealthiness which has been perceived there for several years back. The most probable cause hereof may be sought in the great increase of the mud-banks along the sea-coast; the water only just covers them; or they are flooded by the tide, which, when it recedes, leaves a thick slime behind it, together with a great deal of animal

\* Instead of simple interest, at three per cent. per annum, for twenty-seven years, we should take compound interest, at the same rate, for twenty-nine years, which would amount to f. 7,316,500, and the whole sum lost to the Company, during that period, by this regulation, would be f. 20,306,500 or about 1,851,500*l.* Tk.

matter, thrown up by the sea, various kinds of blubber, and other marine productions, which immediately putrify by the burning heat, and contaminate the air, uniting with the noxious exhalations of the swamps and morasses near the town. The opinion that the unhealthiness of the place may be chiefly attributed to this cause, seems to be corroborated by the circumstance, that the ravages of sickness and death are much less in the upper parts of the city, which lie the farthest from the sea, than in and near the castle, which is close to the mud-banks and swamps. The mud thus thrown up already reaches, on the east side of the river, more than two thousand feet out from the dry ground.

I have already said something of the province of Jaccatra; namely, that it is a possession of the Company, subdued by their arms, whose natives are their immediate subjects, governed by the council of India, and more particularly under the eye of the governor-general.

A person is appointed by the governor, under the title of commissary of inland affairs, who represents the sovereign in the interior of the country.

He adjusts all differences which arise between the native grandees, with the pre-knowledge of the governor-general, and exacts all penalties and fines which are laid upon them, the greatest part of the profits by which accrue to him. He is feared and respected like a prince in the interior parts, as the happiness of every individual, is almost entirely in his power.

The regents, who are his coadjutors in the administration of the land, are taken from among the natives. The first in rank, are the adapatis, to whom the government of a large district is entrusted. Then follow the tommagongs who are, however, much lower in rank, having the direction over a proportionate smaller extent of country; although each of them stands alone in his local jurisdiction. These have inghebées under them, who are as much as lieutenants, and before whom disputes of little importance between the inhabitants of their districts are settled; yet the parties may appeal to the commissary.

It is only when very important matters occur, in which the Company have a particular interest, that they are brought to the cognizance of the government at Batavia, and settled by them; but this does not often happen.

The commissary, who resides without the city, has a guard of natives every night at his house, and twenty or twenty-four armed attendants, who are Javanese, and stand ready to execute his commands; all being in the pay of the Company.

The chief productions yielded by this province, are sugar, coffee, indigo, and cotton-yarn. The revenues which the Company draw from it, amount annually to full one million of guilders.

The original letters which are written by the council of India to the Indian Princes, are composed in the Dutch language, and signed by the governor-general, and by the secretary, in the name of the government; but translations are always added, in the Malay, Javanese, or whatever other language be that of the Prince to whom the letter is addressed. For this purpose, there are several translators at Batavia, who are well paid, and have the rank of merchants.

The letters, which are sent by the Indian Princes to the government, are written upon gold or silver flowered paper\*, and are brought to the council with much ceremony.

The

\* In the eastern parts of India, paper is prepared from the bark of trees: at Ceylon, and on the adjacent continent, the leaves of the borassus palm tree (*borassus flabelliformis*), and sometimes of the talpat tree

The letter which the Emperor of Candy sent to the government at Batavia, after the conclusion of peace, containing the full powers of his embassadors to negotiate concerning certain matters, which could not be adjusted at Ceylon, was written upon a leaf of beaten gold, in the shape of a cocoa-leaf; the letters were engraved upon it with a steel pen, in a most curious manner. This leaf was rolled up, and inserted in a cylindrical case of gold, which was wound all round with a row of pearls, strung upon gold thread. This case was in a box of massy gold, and this again in one of silver, which was sealed with the emperor's great seal, impressed in red wax. The silver box was inclosed in one of ivory, which was put in a bag of rich cloth of gold; and finally, a bag of fine white linen, sealed up with the emperor's lesser signet, encircled the whole.

When these embassadors had their audience of the council of India, they were received with extraordinary honour; all the members of the assembly standing up, both when they came in and when they went out, though without uncovering their heads. When the embassadors left Batavia, they were each presented with a gold chain by the council.

All goods which are carried into or out of Batavia are subject to duties, which are levied at the bar, at the entrance of the city. These, as well as the other taxes and imposts, are annually farmed out, generally to Chinese. The whole of them amount together upon an average, to 32,000 rix-dollars, or £76,800 per month, making £921,600 per annum\*.

Of the several islands which lie before Batavia†, there are no more than four which are made any use of by the Company, and of these that of Onrust is the principal. This island lies about three leagues north-west from Batavia; it is nearly round; it rises six or eight feet above the surface of the water, and is of small extent, being about four thousand eight hundred feet in circumference. In the centre of the island, and within a fort, consisting of four bastions and three curtains, stand the warehouses and other buildings. On these fortifications, and on three small out-works which are constructed at the water's edge, the walls of all which are whitened with lime, are mounted sixteen pieces of cannon, of various sizes‡.

In

tree (*licuala spinosa*), are used instead of paper. The leaves of both these palm trees, lie in folds like a fan, and the slips stand in need of no further preparation, than merely to be separated, and cut smooth with a knife. Their mode of writing upon them consists in engraving the letters with a fine pointed steel; and in order that the characters may be the better seen and read, they rub them over with charcoal, or some other black substance. The iron point made use of for a pen is either set in a brass handle, and carried about in a wooden case, of about six inches in length, or else it is formed entirely of iron; and together with the blade of a knife, designed for the purpose of cutting the leaves, and making them smooth, set in a knife handle, common to them both, and into which it shuts up. When a single slip is not sufficient, several are bound together by means of a hole made at one end, and a thread on which they are strung. If a book be to be made, they look out principally for broad and handsome slips of talpat leaves, upon which they engrave the characters very elegantly and accurately with the addition of various figures, by way of ornament. All the slips have then two holes made in them, and are strung upon a silken cord, and covered with two thin lacquered boards. By means of the cords, the leaves are held even together, and by being drawn out when they are wanted to be used, they may be separated from each other at pleasure. Tr.

\* About 83,800l. sterling. Tr.

† They are in all fifteen in number, and have the following names given to them: Onrust, de Kuiper, Purmerend, Engels Onrust, Rotterdam, Schiedam, Middleburgh, Amsterdam, Horn, Harlem, Edam, Enkhuizen, Alkmaar, Leyden, and Vader Smit. The two first are the innermost, and are fronting and within sight of the city. Tr.

‡ "The fortified island of Onrust," says Captain Parish, "is well situated to command the channel that affords the principal passage into the road. The work upon that island was of a pentagonal form;

its

In the year 1730, under the government of the governor-general Durven, a small church with a steeple was erected here; where service is performed on Sundays by a clergyman, who comes hither from Batavia, for that purpose, every week.

The Company have here ten or twelve large warehouses, which are almost always quite full of goods: pepper, japan copper, saltpetre, tin, caliatour-wood, japan-wood, &c. They are under the direction of two administrators, who, as we have before mentioned, have very lucrative places.

On the north side of the island stand two saw-mills; and on the south side there is a long pier-head, on which are three large wooden cranes erected for the purpose of fixing masts in ships, or unstepping them. Three ships can lie here behind each other, alongside of the pier, in deep water, to be repaired, or to receive or discharge their cargoes. There is another pier a little more to the westward, called the Japan pier, where one more ship can lie to load or unload.

There is twenty and more feet water against the piers, and it rises and falls about five feet once in four-and-twenty hours. All the Company's ships that require it are hove down at the wharfs along the piers, and receive every necessary reparation with ease and dispatch\*.

The government of the island, and the direction over the repairs of ships which take place here, is entrusted to a master carpenter, who has the management of every thing, except what relates to the departments of the administrators of the warehouses. His office is esteemed a very profitable one, and he has the rank of senior merchant. Though the island is but small, the number of people dwelling upon it is supposed to be near three thousand, among whom there are three hundred European workmen.

About sixteen hundred feet from Onrust, is the island de Kuiper, or Cooper's Isle, which is one-third less in size than the former. The Company have several warehouses upon it, in which coffee is chiefly laid up. There are two pier-heads, where vessels may load and discharge, at its south-side. There are several large tamarind trees interspersed over the island, which afford an agreeable shade. The workmen who are employed here in the day-time are fetched away at night to Onrust, and only two men remain behind as a watch, together with a number of dogs, who are remarkably fierce, so that no one dares to set his foot on the island at night.

To the eastward of Onrust, and at twice the distance of Cooper's Isle, is the island Purmerend, which is half as large again as Onrust. It is planted with shady trees; and in the centre is a building which serves for a hospital, or lazaretto, for persons afflicted with the leprosy, or other incurable diseases, who are sent thither from Batavia. It is supported by the alms of both Europeans and Javanese, but the latter contribute the largest share.

its bastions were small and low, not more than twelve feet the highest; and not always connected by curtains. A few batteries were lately constructed on the outside of this work, that bore towards the sea. On these, and on the bastions, about forty guns were mounted, in different directions. South of this, was another island" (this must be that called de Kuiper) "at the distance of a few hundred yards, on which two batteries, mounting together twelve guns, had been lately erected." This account dates in 1793, and proves that the Dutch have become sensible of what is alleged in this work, page 253, that the fortifications at the mouth of the river are insufficient to protect the road. TR.

\* "It would be injustice," says Captain Cook, "to the officers and workmen of this yard, not to declare, that, in my opinion, there is not a marine-yard in the world, where a ship can be laid down with more convenience, safety, and dispatch, nor repaired with more diligence and skill." TR.

The

The island of Edam lies about three leagues north-north-east from Batavia. It is about half an hour's walk in circumference. It is very woody, and has abundance of large and ancient trees. Among them is one, the trunk of which is so large that twenty men with their arms extended are not enough to encompass it; its outward branches shoot downwards, and taking root, as soon as they reach the earth, grow up again into trees; I saw some of them that were already two feet thick; it is esteemed holy by the Javanese, and is much venerated by them\*. The Company have some warehouses on this island for salt; but the chief use they make of it, is as a place of exile for criminals, who are employed in making of cordage; and over whom a ship's captain is placed as commandant.

\* This is the banian-tree, *ficus indica*, or Indian fig-tree. T&.



## ACCOUNT OF CELEBES, AMBOYNA, &c.

FROM THE VOYAGES OF STAVORINUS.

**I**N order to throw more light upon the affairs of Macasser, it is necessary to become acquainted with the principal kingdoms and states of Celebes, and to have a sketch of their history down to the present time. A manuscript on this subject has fallen into my hands, which Mr. Blok, formerly governor of Macasser, composed from authentic records, and continued down to his time, that is, till 1759: in order, however, not to repeat too much of what Valentyn may already have written, whose account of Macasser I have not by me, I shall only state the most prominent parts of the history of Celebes since the beginning of the present century.

**CHAPTER I.**—*Account of the Kingdom of Macasser. — Their ancient Traditions. — Sketch of their History. — Oath of Fidelity to the Company taken by the Kings of Boni and of Goach. — Constitution of Goach. — Laws. — Religion. — Former Prosperity of the Macassers. — Kingdom of Tello. — Of Sandrabony.*

THE empire or kingdom of Macasser, which, before the conquest of it by the Dutch, was so closely united with those of Tello and Sandrabony, that it made, as it were, but one state, extended along the sea-coast, from Boeleboele, in the bay of Boni, to the point of Laffem (called Laffoa, in our maps), and thence westward to the point of Touratti, or Tanakeke, and along the west coast northward, to Tanette, or Aganondje, and reached inland as far as Boni and Soping, through the whole of which the original language of the Macassers then prevailed.

The Kings of Goach and Tello are both called Kings of Macasser, although each is a separate state, taking their names from their respective capitals, Goach and Tello.

The ancient fabulous traditions of Macasser, according to a manuscript, translated out of their language, of which I had the perusal, make mention of four Kings, before the coming of Toemanoerong, which signifies one descended from heaven.

It happened, as these traditions relate, at a certain time, after the death of these four Kings, that a beautiful woman, adorned with a chain of gold; descended from heaven, and was acknowledged by the Macassers for their Queen, under the aforesaid denomination of Toemanoerong.

Upon hearing the report of the appearance upon earth of this celestial beauty, the king of Bantam went thither and sought her hand in marriage, though he had before wedded a princess of Bontain. His suit was granted, and a son was begotten in this marriage, of whom Tormanoerong was two or three years pregnant, so that the child could both walk and talk immediately after he was born; but he was very much distorted in shape. His name was Toema-Salingaberieng. When he was grown up, he

broke the chain of gold, which his mother had brought with her from heaven, in two pieces, after which, she, together with her husband and his brother, vanished in a moment, taking with her the one half of the chain, and leaving the other and the empire to her son. This chain, which the Macassers sometimes say is heavy, sometimes light, at one time dark coloured, and at another bright, was ever afterwards one of the principal regalia of the Kings of Goach, till in the revolution of Crain Bontalancas, it was lost, as I was informed, together with several other regal insignia.

The manuscript I alluded to, traces the origin of the Princes of Goach from this son of Toemanoerong, who, together with his three successors, it is added, did not die, but vanished in the same manner as their parents; and the eighteenth King, after him began his reign under the name of Paducca Siri Sultan Shah Badin Ismael.

Although this King did not long occupy the throne, he waged a furious war against the King of Boni, who was reinforced by the arms of the Company.

He was deposed by the nine estates of the country of Goach, and they elected in his stead the King of Tello, who was called Mappa Orangie, but, as King of Goach, he took the name of Paducca Siri Sultan Sira Joudeen.

In the year 1718, the Macasser Prince, and afterwards famous rebel Caraing, or Crain Bontalancas, fled from Goach, having killed a daughter of the former King, and sought an asylum among the Dutch, living under the Company's protection, in the campon Baro. He afterwards went from here to Sumbawa, and assisted in the war which raged between the Sumbawers and Baliars, in which the King of the former was killed. He wedded the daughter of this Prince, who was afterwards Queen of Sumbawa, and whose mother, marrying with the King of Goach, persuaded her daughter to be divorced from Crain Bontalancas, and to marry a Prince of Sumbawa.

In the year 1724, the King, Sira Joudeen, gave up entirely to his son the kingdom of Tello, and taking upon himself the sole administration of that of Goach, soon gave so much umbrage to the Macasser Princes, and especially to Bontalancas, that the latter, who was become both furious and desperate, from his forcible separation from his wife, formed a resolution of taking ample revenge upon the King. In order to compass this purpose, he procured, not only several of the discontented Macasser Princes, but likewise many Bouginese of high rank, to take part in his conspiracy; and he afterwards entered into the most solemn engagement with the famous pirate Aroe Soenkang, and his Captain Touassa, to dethrone the Kings of Goach and Boni, and wholly to expel the Dutch from Celebes.

Accordingly he kindled the flames of war, in the year 1734, in Bontain, whence they soon spread far and wide. In the beginning of the war, Bontalancas gained many advantages, and made so much impression upon the King of Goach, that on the 5th of November 1735, he fled from Goach to Tello; upon which the Macasser estates immediately elected his grandson, surnamed Malawange Abdul Haerman Shoer, twentieth King of Goach. But he likewise was forced to yield to the arms of the rebels, and abandon his capital, which was immediately taken possession of by Crain Bontalancas; while the King, together with a considerable number of Macassers, fled as far as Fort Rotterdam, where in the year 1739, he put himself under the protection of the Company.

Crain Bontalancas, being master of the country of Wadjo, and of part of the kingdom of Boni, came down a short time before to the northern provinces of the Company, and caused himself to be installed King of Goach.

Soon afterwards, he summoned Fort Rotterdam in the name of the three united empires of Boni, Goach, and Wadjo. But the governor not being speedy enough in his determination, the whole force of Goach and Wadjo soon appeared upon the plain before the fort. The garrison, reinforced by a body of Bouginefe, who were attached to the Company, and by the Company's subjects, marched against the enemy the same day, being the 16th of May 1739, and falling upon them with great fury, soon put them to flight, and throwing up a battery of sixteen pieces of cannon, where a good number of them took post, they returned in triumph to the fort.

The enemy, on the other hand, intrenched themselves against us, and daily skirmishes took place, till on the 14th of July, when the country being sufficiently dry, that the artillery could be transported, the garrison made another sally, and being joined by their Bouginefe allies, and other auxiliaries, together with the Company's subjects and the Macasser refugees before-mentioned, they fell upon the enemy early in the morning of the 17th of July, by surprize, and after an obstinate resistance, and a bloody battle, which lasted till four o'clock in the afternoon, they gained a complete victory.

This victory was of the greater importance, as by it the treacherous hopes of the Macasser refugees were frustrated; for though they had joined our troops, they were almost all inclined to the rebel party, and had concerted with their chief, that, as soon as the balance turned the least in his favour, they would join him, and turn themselves against us.

Three days after this, when the rebels again tried their chance, they were beat anew, and put to flight by our troops, leaving behind them many dead and wounded. Crain Bontalancas, who had thrown himself into Goach with all his troops, was himself wounded. Our men pursued them hotly, and at three o'clock in the afternoon they came before the town, and immediately threw up some batteries, which were ready in the evening, and played with so much effect during the night, that at four o'clock the next morning our commander in chief, Admiral Smout, received intelligence that the enemy had abandoned the town, and had fled to the mountains; by which the war, on this side of Celebes, was put an end to. The regalia of Goach were immediately collected, and, together with the kingdom of Macasser, were restored to the monarch who had last fled from Goach, Abdul Haerman Shoer, and to the regent of the empire.

Most of the adherents of Crain Bontalancas then came in, and submissively entreated for pardon. Among them, was a man of upwards of a hundred years of age, Crain Alamanpang, a younger brother of Crain Pomliaan, who had been a fugitive of the former century. On surrendering his kris, he spoke as follows:

"I have beheld this city of Goach in its proudest lustre, when it ruled over the whole island of Celebes; I afterwards was a witness to its first humiliation, when we were subdued by the Company; it was then thought its fame and honour were greatly tarnished, yet it was still populous and respected; but now I look around me, and behold nought but ruins and dishonour. I surrendered my kris the first time at Sambopo, once more at Sourabaya, and now here, for the third time, to the conquering arms of the Company; leave to an old man now the only consolation that remains—to die in peace."

He received a free pardon, and his kris was restored to him.

A short time afterwards, intelligence was received that Crain Bontalancas had died of his wounds.

to

King

King Abdul Haerman Shoer dying on the 27th of July 1742, in the seventeenth year of his age, his brother, Mappa Babaffa, a child of eight years old, was chosen successor to the crown of Goach, under the guardianship of the regent Crain Madjen-nang. Nothing material occurred during his reign. He died on the 21st of December, 1753, and was succeeded by his son Amas Madina, surnamed Patterma Tharie, who was the twenty-second king of Goach, and in the year 1758, was re-named Battara Goach, by the regent, who was, at the same time, his grandfather.

Thus far the manuscript of Mr. Blok. What follows, was related to me at Macasser.

After the death of his grandfather, the regency fell into the hands of the uncle of king Battara. This man, urged by the ambition of enjoying the crown himself, caused so much vexation to his nephew and sovereign, that the latter abandoned his kingdom and Celebes, and fled to the westward, no one knew whither.

But the regent, seeing that matters were not yet sufficiently ripe, nor the nobles of Goach properly prepared to admit of his usurping the crown himself, contrived that a younger brother of the King should be exalted to the throne; whose life, however, he equally found means to embitter so much, that he also quitted his dignity and country in despair\*. Upon this, the artful regent was consecrated King, and he took upon himself at the same time the office of regent, or prime minister, in order to avoid another's playing the same part which he had acted before.

This Prince was on the throne in the year 1775, when I was there. He was described to me as a very wise monarch, who distributed impartial justice to his subjects, and kept a watchful eye over all the foreign relations of his country; especially over the kingdom of Boni, for which, in common with all the other Kings of Goach, he entertained the most inveterate hatred; for its present prosperity and power were founded upon the decline and ruin of Macasser. An equally deep-rooted mutual hate exists at Boni, where they leave nothing untried, by means of their more strict connections with the Company, to humble the power of Macasser, and render its fidelity suspected.

An instance hereof occurred in the year 1770, upon the arrival of the present governor of Macasser, Mr. Van der Voort. The King of Boni, having received information that a new governor was expected from Batavia, caused an intimation to be conveyed to the King of Goach, by a third or fourth hand, that one of the fugitive Princes was coming over with the governor, who was to be restored to the throne of his ancestors, while the usurper would be taken prisoner, and sent into banishment. In order to effect the latter purpose, it was alledged, that the opportunity would be availed of, when the King of Goach, according to ancient custom, came to renew the oath of fidelity to the Company, upon the accession of a new governor†.

This

\* It was in the year 1767; that the king of Goach, thinking himself insecure on his throne, abandoned his kingdom, and fled to Bima, where he was overtaken and sent to Batavia. He was a weak and pusillanimous Prince, and preferred a petition to the Dutch government that he might be exiled to Ceylon, where he lived for many years, in the castle of Colombo, receiving a monthly allowance of fifty rix-dollars (about 130l. sterling per annum, from the Company. Huyfers beschryving der Oost-Indische Etablissemerten, page 42. Tr.

† The oath of fidelity, and alliance to the Company, is taken by the Kings of Goach and of Boni, with the following ceremonies: The King, dressed in cloth of gold, and wearing the chain which the Company have presented to him, in token of alliance, and every link of which represents a flower made of massy gold, with a medal pendant from it, with the initial letters of the united East-India Company engraved upon it, presents himself with his courtiers and liegwards at the government-house in Fort Rotterdam.

This Prince, deceived hereby, came at the appointed time to Fort Rotterdam, not with his usual suite, but accompanied by five or six thousand well-armed men, and refused to enter the walls of the fortress without these troops, saying, at the same time, the reason why he came in this manner; but when the Company's servants pointed out to him the groundlessness of his suspicions, and the evident falsity of his information, he was prevailed upon to lay aside his distrust, and every thing passed off without further difficulty; so that the King of Boni was disappointed in his object. Yet the King was so fearful, and upon his guard, at the feast which the governor gave that day to the native Princes, that neither he nor his attendants would touch any wine, nor any of the provisions which were set before them.

I saw this Prince twice; he is rather corpulent, grave in his appearance and conversation, and attentive and reserved in his manners.

The King of Goach is not an absolute sovereign: he is subject to the laws of the land, and may not perform any important regal functions without the concurrence and approbation of the body of nobility. Crimes are punished according to laws, and not by the arbitrary will of the monarch. His privy counsellors are called *tomani lalangs*.

Every negree, or township, has a chief, called *galarang*: this rank was instituted by the eighth King of Goach, in the beginning of the sixteenth century, perhaps at the instance of the Portuguese, who first arrived at Celebes, and obtained a footing there during the reign of that King, in the year 1512.

His successor appointed and regulated measures and weights for general use; he fixed prices upon the articles of trade; he manufactured gunpowder, and first mounted artillery upon the walls of Goach. He afterwards not only allowed the Malays to settle in his states, but, together with other privileges, he granted them that of building a temple, and openly professing the Mahomedan faith. This religion gained so much ground here, that the Macassers, by means of the Malays, dispatched an embassy to Mecca, to fetch a *stadja*, or priest, from that place, for the purpose of instructing them in the religion of the Arabian impostor, which was at last universally established throughout the Macasser empire, in the year 1603, under the thirteenth King, Sultan Allah Oudeen; and three years afterwards they forced the people of Boni equally to subscribe to the doctrines of the Koran.

The power of Macasser was at its highest pitch about the middle of the last century, when its Princes not only ruled over almost the whole of Celebes, but had likewise rendered Loma, Mandelly, Bima, Tambora, Dampo, and Sangar, tributary to them, and had conquered Bouton, Bungay, Gapi, the Xulla islands, and Sumbawa. They moreover held the government of Saleyer, which had been given to Macasser by Baab Ullach, King of Ternate; they were in strict alliance with the inhabitants of Bali, and coined the first gold coins which were probably the gold mas, of the value of sixty Dutch stivers.

About that time also the alliance between Goach and Tello was renewed; and these two states were so firmly united together, that it was a common saying, that there were "two lords, but one people." By the articles of union it was settled, that all levies

His attendants first dance their war-dance, with their kris'es and assagays. A chapter of the Koran, relating to the taking of oaths, is then read to the King, in Arabian, to which he listens with great attention and veneration. He then folds his hands, and lays them three times upon the book, and afterwards upon his head. Next he takes his kris of state, and dipping the point of it in a silver horn of water, stirs it about with it, and lets a few drops which remain upon the point fall upon his tongue; by which the oath is completed, in the most solemn manner. S.

and contributions from conquered provinces, &c. should be divided into five parts, two of which were to be given to Goach, and two to Tello, while the fifth should fall to the share of the eldest of the two Kings; that the eldest of the Kings should always exercise the office of regent, or prime minister, to his junior colleague; that they should both be equal in dignity; and, lastly, that they should both enjoy the title of Sambanco, signifying as much as Emperor.

The empire of Macasser has at present so much declined, under the influence of the powerful arms and the artful policy of the Company, that the King of Boni is now much superior to Goach, both in extent of territory and number of subjects; although, in war, a Macasser is better than three Bouginese, on account of their martial character and undaunted courage, which, notwithstanding all the adversities which have fallen upon them for a century past, have never been subdued or diminished\*.

It is worthy of remark, that the Kings of Macasser have a new name given to them after their death, and that their successor must be nominated before their interment.

The kingdom of Tello was bounded, in the year 1667, to the north by the Coerees, two islands situated a little to the southward of the river Maros, and to the south it reached as far as Fort Rotterdam. The intimate connection between this kingdom and that of Goach has before been mentioned; and both have, in consequence, participated in the same changes of fortune.

The ninth King of Tello, Abdal Carie, died in January 1709, and was succeeded by his son Mappa Orangie, who was elected King of Goach in the year 1712, and ruled over both kingdoms till the year 1724, when he gave up that of Tello to his son Man Radja, or Radja Mouden. To him succeeded, according to the records of the Company, but in what year is not mentioned, his brother Mappa Enga, or Jappee Oeden; this Prince, known by the name of Crain Tello, was the grandfather, and regent of the King of Goach, in the year 1759, and an inveterate enemy of the Company. After his death, his daughter, the present reigning Queen, succeeded to the crown.

The kingdom of Sandraboni, lying within the bounds of Macasser, on the western coast of Celebes, between the Company's lands at Galiffong and Poelonbanheen, is small in extent, yet independent of Goach. In the time of Toena Parie, King of Macasser, in the beginning of the sixteenth century, the Queen of Sandraboni entered in an alliance with the Macassers, its liberties and immunities remaining, however, unimpaired; and since that time it has, as well as Tello, been subjected to the same fortunes as Goach.

Mappa Doelang, afterwards King of Goach, ruled over this small state, at the time of the war conducted by General Speelman, and, together with his nobles, accepted and swore to the engagements with the Company in 1667 and 1669. The Kings of Sandraboni are mostly related to the royal family of Goach.

The city stands a little inland, on the banks of a river, whence the kingdom derives its name. It was built about the same period as Samboupo and Tello. This is all that I learnt respecting it.

\* In 1778, a finishing stroke was given to the independence, and power of resistance, of Goach; the reins of government were, at that time, on account of the nonage of the King, in the hands of his mother Queen Radja Polakka, a woman of an ambitious and intriguing disposition, who, probably aiming at the total emancipation of her country from the yoke of the Company, raised a rebellion against it, in which her forces were subdued, the city of Goach taken by assault, its fortifications razed, and the government new modelled, so as to be entirely conformable to the views of the conquerors. Tr.

CHAP. IX. — *Account of the Kingdom of Boni. — Sketch of its History. — Their first Kings. — Origin of their Enmity to Goach. — Singular Revolutions under Queen Bat-tara Todja. — Piracies of Aroe Seenkang. — War with Wadjo. — Aroe Tanete, a Cannibal. — Method of accusing and punishing Criminals. — Story of a Ducl between two Princes, Grandsons of the reigning King. — Cruelty of the King towards the Object of their Disagreement.*

AT the time of the Boni contract, that kingdom extended along the western shore of the gulph, which is still called the Bay of Boni\*, from the river Chinrana to the river Salenico, a length of about twenty leagues; inland it bordered upon Soping, Lamoere, Macasser, and Boeleboele. This kingdom was independent of and unconnected with any other in very ancient times. Their traditions affirm, that their first King likewise descended from heaven. When he came upon earth he had no name, but was afterwards called Matta Salompo by the people, signifying as much as, all-seeing. He married a Princess of Toro, who was equally of celestial origin; he had by her one son and five daughters, from whom all the succeeding Kings of Boni are descended, and of whose posterity, born from marriages with royal Princesses, such only being, in every respect, entitled to the crown, according to Mr. Blok's account, no other remained alive in 1759 than Aroe Palakka, the grandmother of the then reigning King of Goach. She was still living when I was at Macasser in 1775, and governed as Queen of Tannetta.

This, their first monarch, instituted the laws of the country, which are still observed; he made the royal standard, called Worong Porong, and appointed seven electors, under the denomination of Matoua Petoës. These are hereditary in seven families, though it has sometimes happened that two, and even three of them, have been of the same lineage. This high office descends upon women as well as upon men. All matters of importance, relating to the kingdom, must be determined by them: their power, in particular, extends over the election and deposition of the Kings, and the making of peace and war†.

King

\* Called Sewa by the natives, and Bugguefs, or Long Bay, by the English. The following account of it, given by Captain Forrest, from the information of a Bugguefs noquedah, or sea-captain, may not be unacceptable: "Having passed the strait between Celebes and Saleyer, called the Budgeroons, keep on in a direction north-east-by-north, about one hundred and thirty miles, and you will find near the west coast of the Sewa a small island called Baloonroo; it is visible eight or ten leagues off, and has some rocky islets at its east end. Farther on, about a day's sail, which I fix at sixty miles, is the mouth of the river Chinrana: this river takes its rise in the Warjoo country, the capital of which is called Tofforo, and lies a day's journey by water from the mouth of the river; it afterwards passes through Boni: it has a good muddy bar, passable by large ships, and is navigable a good way up; it has several mouths, and there are many towns on its banks, where a great trade is carried on in gold, rice, sago, cassia, tortoise-shell, pearls, &c: the anchorage is good off the river's mouth. Half a day's sail farther north, along the west coast of the Sewa is the river Peeneekie, not very considerable. Farther on are two places called Akolingan and Telludopin, which are pretty well inhabited. Continuing still north, you come to the river Sewa, not very considerable; then to the river Loo, famous for boat-building: then you come to Mankakoo, where there is gold, and much sago, very cheap; they have also cassia and seed-pearl. Being now come to the bottom of Bugguefs Bay, the sago-tree abounds very much; and in many parts of the Sewa, there are spots of foul ground on which they fish for swallow, which they generally carry to Macasser, to sell to the China junk. On the east side of the Sewa the country is not so well inhabited as on the west side. The south-east point of the Sewa is called Pajungan: here is a cluster of islands, rather small, with good anchorage amongst them." Tr.

† According to Forrest, Boni is governed by a Prince, who is called Pajong. He is elected for life by seven nobles, a fixed number, which may be kept up by the Pajong (but not increased); from the dyons (certain



King Matta Salompo, say the natives, after having reigned forty years over them, ascended into heaven with his Queen.

The Bouginese, and Queen Tarre Toeppoe, who then ruled over them, were compelled, in the beginning of the seventeenth century, to conform to the Mahomedan religion, and the condition was, moreover, imposed upon them, that the enemies of Macasser should likewise be the enemies of Boni, but not the enemies of Boni those of Macasser.

This was the first blow which was given to the greatness of Boni, although they were able to bring seventy thousand fighting men into the field.

The hatred which, by this means, was excited among the Bouginese against the Macassers, was greatly instrumental to the success of the arms of the Company against Macasser. Radja Palacca, a Bouginese Prince, whose exertions in particular contributed much to the completion of the conquest of Macasser, was afterwards chosen King of Boni, by the electors, and rendered himself so famous and powerful, extending the bounds of his kingdom in every way, that he was called by his people Toenee Sombaya, signifying, a King before whom all others must humble themselves.

He died on the 6th of April 1696, and was succeeded by his son Lapatoua, as fifteenth King of Boni, who, after having been the cause of much uneasiness to the Company, died in the year 1713.

His daughter Battara Todja, likewise called Aroe Toemoerang, succeeded him, as the sixteenth sovereign of Boni. After reigning a short time, she resigned the government in the year 1715, into the hands of her half-brother Lapadany Sadjati, surnamed Toapannara Aroc Palacca; but his ill treatment of his sister and her husband, whom he caused to be rampassed, or beaten with sticks, and whom he threw into confinement at Boni, without any shadow of reason, or legal pretence, was so much disapproved of and repented by the nobles, that shortly afterwards, on the 20th of January 1720, he was not only deposed, but, together with his wife, was thrown into prison. After this the Bouginese again gave the kingdom to Battara Todja, who, however, directly resigned it anew to her eldest half-brother, the dethroned King of Goach, Sappualee, then surnamed Madanrang; he likewise was deposed in the year 1724, after a short and turbulent reign, on account of his dissolute conduct, and his youngest brother Topawanoi, or Aroc Mano, afterwards called Crain Bessie, was chosen in his stead; on the fourth day after his appointment he was also set aside, and in his room Battara Todja was chosen Queen for the third time; she became at the same time Datoua, or Queen of Loehoe, and not long afterwards Queen of Soping also; her husband was appointed co-regent with her of the kingdom; he died in the year 1725; after which she was married, for the fourth time, to Aroe Kayoe, who was, shortly after his nuptials, equally made co-regent of the kingdom. But the Queen being at variance with her brothers, one of whom she had caused to be killed, and being dissatisfied with Mr. Goubius, at that time the Company's governor at Macasser, went away to Soping, where she caused herself to be inaugurated as Queen.

Her husband, the regent, Aroe Kayoe, now thinking himself King of Boni, resolved to supplant his Queen and consort, and to take again to his bed his first beloved wife Crain Bonto Majene, whom he had repudiated in order to marry the Queen; but when this design was discovered, in the year 1728, he was immediately declared

(certain freeholders). The Pajong is often restrained by a sort of parliament, elected by the freeholders: it consists of four hundred members, two hundred of which are called mattoua, one hundred are called pabicharro, and one hundred are called galarang. "But of this (he adds), I never learnt a distinct account; and I mention it only as a hint for future travellers." Tr.

unworthy of the regentship, and his life was so much endangered, that he was obliged to fly by night to Tello, where he received protection. He afterwards became connected with Crain Bontalancas, and lost his life in the commotions excited by that famous rebel.

In the year 1730, the three remaining brothers of the Queen of Boni came from Bouton, whither they had fled for fear of their sister, and took refuge under the protection of the Company, who allowed them to reside in the campon Baro.

The Queen, in the meantime, continued discontented with the Company, because the province of Bontain was withheld from her; while her madanrang, or general in chief, and her tomarilangs, or privy counsellors, conducted every thing at Boni according to their own wishes, and adhering to the enemies of the Company who arose about this time, Aroe Seenkang and his followers, and the rebel Crain Bontalancas, they prepared the way for the ruin of the kingdom of Boni, which was effected in the following manner:

Aroe Seenkang, a discontented Wadjorese Prince, had for some time, together with his captain, laut, or admiral, touffa, been committing piracies; he had taken Passir and Coety, and had even attacked the vessels of the Company.

These freebooters, therefore, in the years 1735 and 1736, carrying their depredations to a great excess in the neighbourhood of Mandhar and Cajelie, were encountered by the cruising vessels of the Company, but to no purpose; and, in the beginning of the year 1736, they landed in sight of Fort Rotterdam, on the adjacent islands, belonging to the Company, where they plundered the inhabitants, and burnt their houses. Upon this our government equipped some vessels at Macassar, who attacked the enemy, but the battle was stopped by the evening coming on; and in the night, the enemy having effected their purposes, cunningly gave us the slip, and got away to Wadjo, without having suffered any material damage.

The Wadjorese, notwithstanding the earnest representations of the Company's servants, obstinately refused to deliver up Aroe Seenkang; and the Bouginese in consequence declared war against them. But it was prosecuted with very little vigour; for the general and the counsellors of Boni, as we have before seen, were in collusion with the enemy; whence this war had an unfortunate issue.

The Queen of Boni perceiving the treachery, though too late, sent for the Princes, her brothers, who had left Bouton, and were gone over to the Company, and gave the command of the army to the eldest; but matters had already taken so bad a turn, that there was scarcely any possibility of retrieving them, so that they were compelled to make peace with Wadjo.

A little before, our people, at the request of the Soping nobles, had let Aroe Tanete, surnamed the Mad Duke\*, go to Soping, to defend that country against the Wadjorese; but he, attending little to the war with Wadjo, procured, by his intrigues, the Sopingers to depose their Queen, and elect him for their Datoua, or King, in her stead; after which he likewise contrived to have himself chosen King by the Bouginese, of which election they gave communication to the Company's servants at Fort Rotterdam, but it met with their marked disapprobation; and when the Queen herself came forward, he was obliged to give way to her by flight.

Upon this, the Wadjorese made themselves masters of Boni, appointed another Queen, acknowledged the rebel Crain Bontalancas for King of Goach, and

\* Of this Aroe Tanete, it was related, that, like the ancient inhabitants of Celebes, he was a cannibal, and remarkably fond of human flesh, so that he even used to fatten his prisoners, and cutting their heart out alive, he eat it raw, with pepper and salt, esteeming it the most delicious morsel of all. S.

declared

declared themselves, in this manner, as three united countries, and enemies of the Company.

In the month of April 1739, they came down, took possession of Goach, and summoned Fort Rotterdam to surrender. What happened afterwards I have before related in the account I have given of Goach.

When the Company were saved by the fortune of arms, the next step to be taken was to relieve Boni; but this, for some unknown reason, was only done by halves; for when the Wadjorese were twice beaten, they were not pursued as far as their capital Tossora; and those people who refused to renew their engagements with the Company, were suffered to do as they liked, while the disputes with Wadjo, as well on the part of the Company as on the part of Boni, remain unsettled to the present day. [Written in the year 1759.]

In the mean time, in order, as was pretended, to forward the restoration of the public tranquillity, the queen of Boni was prevented from prosecuting her just claim against Aroc Tanete, or the Mad Duke, and, to her further chagrin, the grant of Bontain, which province had been given to that princess, in the same manner as to her predecessors, as a reward for past services, by the Dutch government at Batavia, was annulled.

She died in the year 1749, and her half-brother Lama Ossong, was chosen successor to the crown of Boni, under the name of Abdul Zadschab Djalaloedeen, who was the reigning king when I was at Celebes, in 1775. He was then a man of upwards of eighty years old, and he dwelt in the Bouginese campon, which is not far from our town of Vlaardingen, and, like most of the native villages, is a place of little consideration.

He did not show much esteem for the Europeans; he governed his subjects in an arbitrary manner, with much severity, and paid very little regard to the laws of the country, which he always explained according to his will.

All criminals are accused before the king, who commissions his prime minister, and one or two more of the nobles, to examine into the affair. As soon as a report is made concerning it, if the culprit be thought worthy of death, the king gives a sign with his eyes, and he is immediately carried out and killed with a kris. If aggravating circumstances occur, the king gives directions for a more severe punishment; the criminal is then bound to a tree, and he is pricked full of skin-deep wounds with krisses, and rubbed with sugar or molasses; the whole body is soon entirely covered with ants, and the poor wretch is not relieved by death before he has suffered the greatest torments. But one of the grandees of the kingdom, or a man of noble birth, is never otherwise put to death for any crime than by the more merciful method of plunging a kris into his bosom.

Mr. Van Pleuren related to me the following instance of the cruel character of this monarch, which had occurred about two years before.

Two princes, grandsons of the King, became both enamoured of the same person, a young princess, who was scarcely more than twelve years old; she was an exquisite beauty, possessed of every accomplishment that an education at the court of an eastern monarch could procure her. Both the lovers, notwithstanding their earnest solicitations that she would make choice of one who should be the favoured youth, could not prevail upon her, for a long time, to decide between them; overcome, however, at length by the vehemence of their entreaties, she at last declared in favour of the youngest. This, as might be supposed, occasioned an implacable enmity between the two princes, which was carried to such a height, that they drew their krisses against each other in a

solitary place, with such fury, that, had they not been fortunately separated by some people who came in time to prevent a fatal catastrophe, they would probably have both fallen victims to their jealousy and love.

As soon as this occurrence came to the ears of the King, he sent for both princes, and reproached them with great asperity, that they were near depriving him of two of his children by their rash and foolish conduct, which was the more unpardonable, being merely for the sake of a woman. He then commanded them immediately to dismiss their animosity, and to live thenceforward together with their accustomed fraternal affection.

Thus far all was right. He next sent for the young princess, and sternly asked her, how she dared to avow a choice between two of his grandsons? The poor girl, trembling and in tears, could make no other reply, than that she had not done so before she was absolutely compelled to it, and was afraid of fatal consequences, if she had remained obstinate in her refusal.

This disculpation was of no avail to soften the indignation of the King; he knew, he said, a way to preserve his children both from such debasing love and from the dangerous consequences of it, and that it would be an unheard-of event that one of his sons should lose his life for the sake of a boyish attachment. He then gave the wonted sign of death, and the wretched object of the violent love and furious hatred of the two princes, was carried out and pierced to the heart, without there being any one found who durst pretend to be her advocate, or that her youth and beauty made the least impression upon the obdurate heart of the cruel monarch.

CHAP. X. — *Account of the Kingdom of Soping; — Sketch of its History. — Lochoe; — Its Productions. — Dissolute Conduct of the present Queen. — Tancie; — Its History. — The Country of Mandbar; — Its Government — History. — Toadja, or Wadjo; — Its singular Constitution.*

THE kingdom of Soping was anciently one of the most powerful states of Celebes; it lies partly along the western shore of the bay of Boni; to the north it is bounded by the great lake called Tamparang Laba, and to the south it borders upon Lamoeroe, which, together with several other small states, formerly belonged to it, but which afterwards became either independent or united to Boni.

It yields nothing but paddee. In the year 1661, after the flight of Radja Palacca, it became a fief of Macasser; but in the year 1667, it was restored to its liberty by the Company.

The Kings of Soping have been allied by marriages to those of Boni from time immemorial. The Sopingers pretend, in the same manner as those of Macasser and Boni, that their first King equally descended from heaven. After him a series of sovereigns, as well Kings as Queens, ruled over them, of whom the present reigning King of Boni is the twenty-second, who, with the consent of the nobles of Soping, governed the kingdom by means of a viceroy; at present, however, namely in 1775, it is again under its own King, who married the daughter of the King of Boni. He is a faithful ally of the Company, and follows in all things the advice of the governor of Macasser, although by the bravery of his people, for one Sopinger is better in war than three Bouginese, he could do much more than the King of Boni. His son is educated at the court of his maternal grandfather.

The part which this kingdom took in the troubles at the time of Crain Bontalancas and Aroe Tanete has before been mentioned.

The kingdom of Loeboe, or Loehoe, was the most powerful and most extensive of all the states of Celebes, before those of Macasser and Boni attained their subsequent celebrity. It stretches at present from Pelopa, the capital of the country, to Larompo, being an extent of about twenty leagues along the western shore of the bay of Boni, and from the other side of the city, over the whole of the south-eastern part of Celebes, between Bugguefs Bay and the eastern coast of the island, as far as the Alforese will suffer them inland; to the west, it is bounded by Wadjo, and to the north by Toradja.

The land is fertile in paddec; it yields likewise good iron, and much gold is found in the rivers\*.

Mr. Blok had not obtained any information respecting their antient history or Kings. The first King of whom mention is made in the records of the Company, is called Crain Harod; he was subdued by the arms of the Company, at the same time with the Macassers at Bouton.

The Queen who ruled over the country, when the account of Mr. Blok was written, was called Tanralele, and sometimes Asha; she was, at the same time, Queen of Tanete; but she was afterwards deprived of the crown by the machinations of the King of Boni, on account of her alleged dissolute life; for, notwithstanding she was already very far advanced in years, she had the finest men daily brought to her for the satisfaction of her shameful licentiousness; while, if she met with any one whom she did not approve, she had him immediately killed and thrown into the river: a grandson of the King of Boni was appointed King in her stead.

This kingdom is likewise in alliance with the Company, and consequently dependent upon them.

The kingdom of Tanete, or Aga Nonsha, signifying a bridge or ford, lies halfway between Fort Rotterdam and the bay of Sorian. It is bounded to the east by the principality of Mariovi-wavo, to the north by Barroe, to the south by Sageree, and to the west by the sea. It stood, in former times, on friendly terms with Macasser; afterwards, upon a war breaking out between them, although Tanete was conquered, it was still reputed independent and a free ally of Macasser; but when the King gradually began to extend his power over this country, it was, and justly, looked upon as a state dependent upon that of Macasser, as it is called in the reports of the conference of Macasser, on the 7th. of September 1668.

At the time of Mr. Speelman, one King Ibrahim reigned here; who, during the peace of Bonaye, joined the Company, and was received as one of their allies, after having entered into and sworn to the engagements dictated at that time by the Company, to which his successors have ever since adhered.

The present Queen Tanralele, upon her being made Queen of Loehoe, and going thither, gave up the government of Tanete to the King of Boni, and to the Company; but having, some years afterwards, been driven from the throne of Loehoe, she came back, and resumed the administration of her own state.

The country of Mandhar borders upon the sea to the west, upon Cajelie to the north, upon Bionangis to the south, and to the east upon a tract of desert mountains, which afford a secure refuge to the inhabitants when they are attacked by too powerful enemies; they then abandon to them their deserted villages on the sea-coast, and do not return to their habitations till they have been left by the invaders.

\* The gold of Celebes is generally got, as on Sumatra, from the beds of rivers and torrents, and there are many springs issuing from crevices of rocks, that bring some gold along with the water, which, running through a vessel bottomed with sand, leaves its treasure behind. Tr.

The government of this country was vested, in former times, in ten nobles, or estates, who had all entered into engagements with the Company; three of them voluntarily; the seven others are commonly called Princes of the seven rivers. They formerly were subject to the Macassers, and, in token of allegiance, were obliged to send a yearly tribute of long shields; they even were forced to receive a governor from Macasser, whom they, however, rejected in the year 1658, though they remained otherwise faithful to that country.

By the contract of Boni, the Macassers resigned all claim to the dominion over Mandhar; after which their Princes, or estates, were several times summoned to enter into treaty with the Company; but they all, except one, obstinately refused to do it. On this account, they were made war against by the Company, and by the Bouginese, but were never subdued, as they always fled to the mountains; but, in the year 1674, fearing that they should be attacked by Radja Palakka, they humbled themselves before the Company, and signed and swore to the engagements required. Yet they never much observed them, especially not those articles which bind them not to navigate any vessels without passes from the Company, and which forbid them to admit any vessels into their harbours which are not provided with such passes. Nevertheless they are deserving of praise and esteem for the respect which they otherwise pay to the Company and to Boni, and for the readiness which they shewed in assisting the Company in the last war.

Toadja, as pronounced by the Macassers, or Wadjo, as pronounced by the Bouginese, is situated north of the river Chinnanse Boni, which divides this country from that of Boni, extending to Panekee, which, though a free state, is esteemed a dependency of Wadjo, and which reaches to Cotenga. Behind Panckee and Kera, Wadjo stretches northwards to Larompo, or Loehoe. To the west it touches upon the Borders of Adja Tamparang, or Scedenring.

It is governed by forty Princes, or Regents, amongst whom women are admitted equally with men. These nobles are all obliged to remain in Wadjo; yet, when requisite, they are allowed to go for a short time to their lands, in order to effect what may be necessary; but as soon as this is done, they must immediately return to Wadjo.

The forty are divided into three distinct bodies, or estates, each of which has a chief banner or flag, to which they belong. Out of each of these three again two chiefs are chosen, one for warlike affairs, who is styled patara, and the other for the civil administration of the government, styled padenrang, who have for their president the mattoua, or elected King, who belongs to neither of the three estates, and constitutes the fortieth Prince, so that each division consists of thirteen members.

These last seven chiefs, to which high authority no woman is admissible, form an assembly in whom the chief government in every thing is vested, in the name of the forty nobles of Wadjo, except in the point of making war or peace, for which the grand council of the forty are assembled, in whose deliberations the mattoua has, if necessary, a double or casting vote\*.

Upon

\* Though our Dutch traveller had undoubtedly the best opportunities for becoming acquainted with the several republican, or rather feudal, constitutions which appear to prevail in the petty states of Celebes, it may not be displeasing to compare his account with that of Captain Forrest, who navigated in the eastern parts of India, at different times, from 1763 to 1776, and whose information on this subject was obtained from the Indians. "Warjoo, or Tuadjoo," he says, "is governed by an elective Prince, called Aramatooa. He is elected for life by the four nobles of the highest rank, called oran cayo batta bazar (nobles of the great flag), from the body of an inferior nobility, called oran cayo batta ampät palo (nobles of the forty flags, there being forty in number). When elected, if he should say, 'I am poor,' which may be the case, the reply made to him by the nobleman who presides at the election is, 'Warjoo berennee, Warjoo cayo, Warjoo guaffu,' which signifies, Warjoo is brave, rich, and powerful; intimating, no doubt, that



Upon the decease of this eminent chief, the three estates, or the thirty-nine nobles as they are then reduced to, are equally assembled, who elect one of their own body to succeed to his dignity, without paying any particular attention to his family: but such regentships of the forty as happen to be vacant, are filled up from the nearest relations of the deceased King, provided they are not born of a bondswoman.

These people had their share in the general oppression which was the consequence of the extension of the power of Macasser, but they redeemed their freedom by the payment of one hundred cattis, being one hundred and twenty-five pounds of gold.

They live very peaceably among themselves, and follow their commercial pursuits with much activity. They are the greatest merchants of Celebes, and at present also the richest and most redoubted nation of the island. They pay no regard to any engagements either with the Company or with Boni, alleging that they have been cancelled by the last war; since, after that time, Wadjo has increased in power in proportion as the consideration of Boni has declined.

CHAP. XI. — *Account of the Kingdom of Tourattea. — The Country of Linques. — Touradja. — The People called Boadjos. — The Kings of Ereka and Letha. — The Country of Cajelic. — Its Productions. — Toerongan. — Its Dependencies. — Boeleboele. — The Island Bouton. — Various petty States upon the Island Sumbawa. — Passir and Coeti, in Borneo.*

TOURATTEA extends from the river Tjeeko, along the sea-coast to the south and east to the river Tino, the eastern bank of which belongs to Bontain; it is bounded on the north by Macasser, and on the west and south by the sea.

In ancient times it was inhabited by a free people, living under several independent Princes; the chief of whom were those of Binano and Bankale. The country of Linques lies between the two last named states, not far from the bay of Tourattea. By the contract of Boni, their independence was allowed by the Company, although the King of Boni looks upon them as his subjects, without admitting them to be equally allies of the Company.

Touradja is a large country, lying inland, bordering to the north upon the Alforese mountains, which separate it from the bay of Tomince; to the east upon Loehoe and Wadjo, to the south upon Sedeenring, and to the west upon the Mandharese mountains.

A large proportion of the Touradjese are mountaineers and idolaters. Another part live upon the water, and their vessels are continually roving round Celebes, the island of Ende and Sumbawa. These subsist by fishing, by the preparing of tripangs\*, and by catching of tortoises for the shells; they are likewise called Boadjos, and are esteemed slaves of Boni, or of Goach†.

The

that he shall want for nothing. He then accepts of the government. Besides the four high, and the forty inferior nobles, there is still a kind of freeholders called dyons, as in Boni. The aramatooa can only keep up the number of the four high and forty inferior nobility, when they are, by want of heirs, extinct; but he cannot increase the number. In Warjoo, the nobility is hereditary." *Account of Celebes, added to Forrester's Voyage to the Mergui Archipelago, p. 75.*

\* The same with swallow, or sea slug, mentioned in the following note. *Tr.*

† The Boadjoo people, who are likewise called oran laut, or men of the sea, are a kind of itinerant fishermen, said to come originally from Johore, at the east entrance of the Straits of Malacca, though some are of opinion that they must have come either from China or Japan. They live chiefly in small covered boats



The Kings of Ereka and Letha, two small districts, in the western part of Touradja, are also in alliance with the Company.

Cajelie lies upon the western shore of Celebes, towards the north, between Mandhar Mamodje, and Sinlensa, which is the southernmost place belonging to the government of Ternate.

By the treaty of Boni, this country was ceded to the King of Ternate; but the government at Batavia afterwards issued orders that it should be considered as belonging to the government of Macassar.

It used formerly to yield much cocoa-nut-oil, and to furnish as much of this article as was wanted by the Company; but since the year 1730, it has been so much ravaged, first by the internal dissensions between their own nobles, and afterwards by the Mandharese, that all the cocoa-nut trees were felled for the purpose of making bentings: the land lies now almost uncultivated and desert, and is subject, for the greatest part, to the Mandharese.

The petty Kings of this country requested the aid of the Company, several years ago, against the Mandharese; upon which some vessels and troops were sent thither, but they behaved so ill, that the natives sorely repented having ever had recourse to the Dutch for assistance.

From the report of the chief persons employed on that occasion by the government of Macassar, it appears that the country was then very productive in paddee; as likewise that it yielded much gold, and that in the neighbourhood of Pavigi, which is situ-

on the coasts of Borneo, Celebes, and the adjacent islands. Others dwell close to the sea, on those islands, their houses being raised on posts, a little distance into the sea, always at the mouths of rivers. They are Mahomedans. They have a language of their own, but no written character. Many Boadjos are settled on the north-west coast of Borneo, who not only fish, but make salt, and trade in small boats along the coast. They make salt in the following manner: they gather sea-weeds, burn them, make a ley of ashes, filter it, and form a bitter kind of salt in square pieces, by boiling it in pans made of the bark of the anee-bong, or cabbage-tree; these pieces of salt are carried to market, and pass as a currency for money. Those settled on the north-west coast of Borneo used to supply the English at Balambangan with rice, fowls, and other provisions. Many of them are settled at the mouth of the river of Passir, who employ themselves chiefly in catching small shrimps with hand-nets, which they push through the mud; the shrimps, after being well washed in sea-water, are exposed to a hot sun; they are then beat in a mortar, and made into a kind of paste called blatchong, which has a strong smell, and is much in request all over India. These last Boadjos may be called fixed or stationary, compared with those who live always in their boats, and who, as the monsoon shifts on the islands Borneo and Celebes, shift their situation to leeward, so as to be always under the lee of the land, for the sake of fine weather. Most of those who rove round Celebes, though they change their situation with the monsoon, consider Macassar as their home. When Captain Carteret lay at Bontain, a fleet of more than a hundred sail of their boats anchored there; they were from twelve to eighteen and twenty tons burden, and carried from sixteen to twenty men: they were all under Dutch colours. The Boadjo boats which Captain Forrett saw at the little Paternoster Islands, between Borneo and Celebes, were about five or six tons burden; several had women and children on board, and their women are said to be capable of managing their vessels, even in heavy seas: they lay at anchor fishing for the swallow or sea-slug in seven or eight fathoms water. They see the swallow in clear water, and strike it as it lies on the ground, with an instrument consisting of four bearded iron prongs, fixed along an almost cylindrical stone, rather smaller at one end than at the other, about eighteen inches long; an iron shot is fixed at the end of the stone, next the point of the prongs. The swallow is dried in the smoke, and sent to the China market. They also dive for it, the best being got in deep water. The black is reputed the best; but there is some of a lighter colour, found only in deep water, which is of more value in China than the black, and sold even for forty dollars a picol; the pieces are much larger than the general run of the black swallow, some of them weighing half a pound. The white is the worst, and is easily got in shoal water, and on the dry land, among coral rocks, at low water: its value is about four or five dollars a picol. The Boadjos are very useful to the Dutch East-India Company, in carrying intelligence speedily from place to place. T.

ated upon the gulph or bay of Tominee, gold is found by digging about four feet under the surface of the earth.

Toerongan is situated inland. This negree, or township, and eight others appertaining to it, bear the denomination of Wauwo Woele, or the lesser mountains. They were formerly all free, and dependent upon no one; afterwards, and posterior to the conquest of Samboupo, six of them were admitted, at their earnest request, into the alliance of the Company; and not long after the people of Touraayo, situated behind Goach, at the foot of the mountains, and some others in that neighbourhood, were equally, at their own desire, included in the treaty of Boni.

In time of war these places are of great importance, but most of them are at present united with Boni; as is the case with Boele-boele and its appurtenances, which is situated in the bay of Boni, at and near the river of the same name. To the west it has Wauwo Woele, to the south the river Cassa, to the north the river Tanka, and to the east the shores of the bay. This country is likewise sometimes called Tellolimpoe; it has three chief negrees, or townships, namely Boele-boele, Lamante, and Radja, which are all independent of each other.

Before and during the war of 1667, these people were the faithful allies of the Macassers, who, by the treaty of Boni, gave up all claim to this country and its inhabitants. After that war it was possessed by the Radja Palacca, and it was governed by him in behalf of the Company, remaining one of their most obedient allies; but after his death, it continued under the dominion of Boni, whose Kings now look upon it as an appendage of their crown.

These are the principal matters relative to the kingdoms and states of Celebes, which I found particularly mentioned in the afore said manuscript account.

I shall, in conclusion, say something of the more distant countries, which, though they do not peculiarly belong to Celebes, have much relation to the Company's government at Macasser.

Bouton is a pretty large island, lying east of Celebes, of which I shall say more, in the account of my voyage from Macasser to Amboyna.

The Kings of this island have equally acceded to the treaty of Boni, though they have not constantly stuck to it; for in the year 1752, they suffered the Company's ship *Rust en Werk* (rest and work) to be plundered by pirates, for which the Boutonniers received a severe correction from the Company in the year 1755; they then fought for aid from Boni and Ternate, but not succeeding in this, they began, by degrees, to incline towards peace, and shewed an inclination to keep their engagements with the Company, without however, either renewing them, or paying the penalty which was imposed upon them by the Company, on account of the perfidiousness they had been guilty of.

The petty states which are situated on the opposite island of Sumbawa, viz. Dima, Dampo, Tambora, Sangar, Papakat, and Sumbawa, are independent of each other, but united together by a defensive alliance, as far as regards their possessions on the island Sumbawa. They are likewise all separately the allies, and under the protection of the Company.

Bima lies at the east end of Sumbawa, about forty-five leagues south of the south-west point of Celebes, and the passage over can be effected, in a good vessel, the whole year round. It is a free state, under whose jurisdiction are comprehended the Straits of Sappy, the whole of Mangery at the west point of the island of Ende, and the island Goenong-api, which last lies a little to the north of Bima.

The

The Princes of Bima, Dampo, Tambora, Sangar, and Papékat have, in general, observed their engagements with the Company pretty well; but those of Sumbawa have paid little attention to them, by the instigation of the Macassers and Wadjorese, who resort in great numbers to these islands, especially the latter, who are great merchants and adventurous navigators, and, with their country boats, they keep the sea in a most surprising manner; they are even said to go as far as the English settlement at Bencoolen, on the west coast of Sumatra\*.

Passir and Coeti are two little states, or sea-ports, situated on the east side of the island Borneo, and were anciently conquered by the Macassers†.

Their Princes used formerly to visit these places alone, or only accompanied by their relatives, prohibiting their other subjects or allies from going thither. But these states were received into alliance with the Company in the year 1686.

In 1726, they were taken by the famous fugitive Wadjorese Prince and Pirate Aroe Seenkang, and have ever since paid an annual tribute to him‡.

CHAP. XII. — *Account of Fort Rotterdam, and of the Lands of the Company around it. — Disputes with the Macassers about the Limits. — The Northern Provinces. — Occurrences relating to them. — Maros. — Siang. — Labaccan. — Sagerce. — Southern Provinces. — Poelmbankceng. — Galiffong. — Islands on the Coast. — Tanakeke, and the Three Brothers. — Bontain. — Character of its Inhabitants. — Description of the Bay and Fort. — Boelecomba. — Productions. — Its Road and Fort. — Bera. — Ship-building. — Description of their Proas. — The Inhabitants.*

HAVING given an account of the principal matters relative to the allies of the Company, I shall next proceed to describe the Company's own lands, which belong to the government of Macasser.

Of the Company's possessions in Celebes, Fort Rotterdam is the chief. It lies in the kingdom of Macasser, and belonged formerly to the jurisdiction of Tello. It is on the west coast of Celebes, in the south latitude of five degrees seven minutes, and is the head settlement of the Company here. It is called Oedjong Pandang in the treaty of Boni, by which it was ceded to the Company, together with the district belonging to it. None of the contracts point out the exact distance to which the jurisdiction round the fort ought to be extended, on which account the Macassers endeavour to circumscribe it to the north within the exterior bounds of the town, or negree, of Vlaardingeng

\* Captain Forrest mentions to have seen fifteen prows, from Celebes, at a time, at Bencoolen, loaded with a mixed cargo of spices, wax, cassia, sandal-wood, dollars, and the cloths of Celebes, called cambays. TR.

† Forrest informs us that Passir was a colony from Wadjo, and that the Wadjorese equally formed settlements on Sumbawa, and at Rhio, in the Straits of Malacca. TR.

‡ Passir seems now to be entirely freed from the influence of the Dutch, the tribute mentioned by the author being ostensibly required for the protection of the freedom of the port; and in 1772, when the English East India Company's ship Britannia was there, a factory was intended to be established chiefly for the sale of opium, Indoostan piece-goods, and the purchase of the precious commodities, spices, gold, wax, &c. brought thither by the Bugguesses; this plan was only frustrated by a commotion taking place in the town, at which the English commander, rather needlessly took the alarm, and quitted the country. Passir was then a place of great trade; with two fathoms water on the muddy bar of a river that led up to the town, forty-five miles, the tide running a good way up above the town; this consisted of about three hundred wooden houses on the north side of the river, most of them inhabited by Bugguess merchants: the house and wooden fort of the Sultan was on the south side, a very little way from the river. The Britannia lay about fifteen miles off the river's mouth, in six fathoms, muddy ground. TA

and its suburbs; to the south within the outward line of the campon Baro; and to the east they define it to extend no farther than to Bontualack.

The difference in this, and in many other respects, between the Macassers and the Company arises from the circumstance, that the treaty of Boni remained in full force after the conquest of Samboupo, or rather that it was never altered and annulled, or at least explained, upon the change of affairs, although the Company have since been three times at war with the Macassers, and the issue has every time been such that they had only to prescribe their conditions; yet this necessary emendation, it seems, has never been thought of.

The present jurisdiction of the Company, as claimed and maintained by them, extends from Sambong Java to what is called the Kraal; thence northward along the salt marshes behind Bontualack, as far as the river Patinga Loang not far from Oedjong Tana.

The northern provinces include the lands of Maros, with the half of Sodian and Barras, or Cabbe Siang; Labaccan, with Bongero and Sageree, which are the plains lying between Tello and Tanete, the proper granaries of Celebes; then the places which are situated between these plains and the mountains; and lastly, the mountain villages, or negrees.

These lands, which border upon each other, have the sea to the west; Tanete and Maros to the north; Lamoeroe to the east; and the kingdom of Macasser to the south.

They were all conquered during the reign of the Macasser King Allah Oedeen, who reduced them to servitude, and divided them by villages and lots among the nobles of Macasser, who received from the inhabitants, as from their own property, the tenth of the produce and the usual feudal services, till October 1668, when, upon the rupture with the Macassers, Maros was taken by the Company and their allies, but it fell again into the hands of the enemy on the 20th of November ensuing; however, upon the conquest of Samboupo, this province was also subdued by our people.

In the year 1736 or 1737, when the northern provinces were overrun by the rebel Crain Bontalancas, all of them either voluntarily or by force abandoned the side of the Company, and took up arms against them; but when Maros was retaken in August 1737, by Governor Smout, most of the chiefs returned to their former allegiance, while the others absconded, though they were afterwards pursued and taken, and underwent a well merited punishment.

Those who returned to their duty, together with other chiefs newly appointed, were summoned in January 1738 to the fort, where those who were guilty, but had returned of themselves received a pardon; and all of them, Labaccan excepted, abjured for ever the dominion of Macasser, and were accordingly again received as faithful subjects to the Company.

A junior merchant has the superintendence over all these provinces; he resides in that of Maros, between the palisaded fort called Valkenburg and the negree Soeryje-rang; the lands around the Company's pagger, or palisaded fort, in the kingdom of Tanete, on the river Pantjana, are also under this resident. The number of negrees, or townships, over which the Company's jurisdiction and the authority of the resident at Maros extends, amounts to three hundred and seventy.

For the government of the inhabitants under the resident Maros has, besides five native regents, who are elected by the elders of the people, from the nearest relatives of such as have died, and are presented to the governor and council at Macasser, who confirm the election, with a reserve nevertheless for the approbation of the government at Batavia.

Siang has one regent chosen from among the natives, who is called Loma.

Labaccan has also one native regent, who has the appellation of Crain.

Sageree has five of these regents, the chief of whom is Crain Mangalong.

The greatest part of the inhabitants of these plains, however, are Bouginese, who are very industrious in agriculture: these again have their own peculiar chiefs, who are appointed by the King of Boni; but they are, as well as the subjects of the Company, liable to the levy of the tenth part of the rice-harvest.

The other provinces lying between these plains and the mountains, have likewise their own regents appointed to rule over them in behalf of the Company, most of them under the title of Crain, with the adjection of the name of the negree, which is under their authority. These last furnish the timber and bamboos wanted for the Company's post at Soeryjerang and logs for repairing the wooden pier at Fort Rotterdam.

Besides these regents they have likewise among themselves several inferior chiefs, whom they call galarangs. They live quietly under their own laws, and in the enjoyment of their own religion; and perform the feudal services required of them by the Company, as their rightful lord paramount.

To the south of Fort Rotterdam, on the west coast, the Company possess the small provinces of Poelem Bankeeng and Galissong, being within the kingdom of Macasser Proper, between the fish-pools of Aing and the river Tjikoa; but the little state of Sandraboni lies in the middle. These plains were subdued by the Company in the war of 1667.

The inhabitants of both these districts make good soldiers, and those of Galissong are esteemed here the best seamen: when the Company want sailors at Macasser, they are obliged to serve without any other pay than their subsistence.

To the province of Galissong belong the island Tanakeke, and the small islands called the Three Brothers, which equally by right of conquest, are the property of the Company, and the inhabitants of them their subjects; as is the case with all the other islands which are scattered along the west coast of Celebes, from the point of Tourattea to Tanete. The Macassers have a colony of Touradjese upon the island Great Barnang; but many of these islands are uninhabited, some of them are inhabited by the subjects of the Company, and a few by Bouginese.

On the south coast and on the east shore of the Bay of Boni, the Company possess the kingdoms of Bontain, Boele Comba, and Bera, together with their dependencies.

Bontain is bounded on the west by the river Tino, which divides it from the kingdom of Tourattea; on the north by the mountains which bear its own name; on the east by the river Kalekongang, and on the south by the sea.

It was anciently considered among the dependent allies of Macasser, and was ruled by their Kings; but it has twice been conquered by the arms of the Company and their allies, and was ceded to them in property by the treaty of Boni.

It is a very pleasant country, and is fertile in rice. There is a larger bay for ships and vessels of all descriptions, and the people of this land, and those of Boele Comba and Bera are the best natured, most peaceful and tractable, of all the subjects which the Company have in the whole island of Celebes \*

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\* Captain Carteret gives us several instances of the patient and unresenting temper of the inhabitants of Bontain, which occurred while he lay there. The bay he describes as a large one, where ships may lie in perfect safety during both the monsoons; the soundings are good and regular, and the bottom soft mud; nor is there any danger in coming in. but a ledge of rocks which are above water, and are a good mark

This kingdom was once given by the Company to Radja Palacca, as a reward for the great services rendered to them; but, from default of male heirs, falling again to them, it was afterwards considered as a too important possession ever to part with it again, without the most urgent necessity.

It is governed by two native regents, who bear the title of Crain; namely one who rules over Bontain, and one over Tompoboële, under whom there are several galarangs, or village-chiefs. All these, together with the serjeant who commands at the Company's pagger, or palisadoed fort, are under the authority of the resident, whose jurisdiction likewise extends over Boele Comba, which was also anciently a separate kingdom, but was brought under the yoke of the Macassers in later times.

It stretches from the river Kalekongang, which divides it from Bontain, to Bera, or rather to the river Banpang, which runs between them; to the north of it lie the mountains of Kyndang, which separate it from Boni, or rather from the highlanders of Touraayo; to the south it is washed by the sea.

This province is likewise one of the conquests of the Company, and its inhabitants are, therefore, their subjects; and they have, together with those of Bontain, the same duties to fulfil, and enjoy the same privileges, as those who dwell in the Company's northern provinces.

Two head regents are in like manner appointed to rule over this district, namely, Crain Gantarang and Crain Oedjonglowe, who have several galarangs under them.

The land is fertile in rice, and abounds in game and extensive forests; but the timber is not adapted to the construction of houses.

In the west monsoon, the road before Boele Comba is dangerous for ships; small vessels, however, can run into the river Kalekongang at high water. At or near the mouth of this river stands the Company's palisadoed fort Carolina, in which the resident, who is a junior merchant, has his abode.

To him is equally entrusted the superintendence over Bera, which province reaches from the river Banpang eastward along the sea-coast to the point of Lassém (called Lassoa in our charts), and thence northward to the point of Cadjang; on the land-side it borders upon Boele Comba, Tourang, and Kadjang, belonging to Boele-boele.

The whole of this country was ceded to the Company by the treaty of Boni. It is barren and rocky, and yields to its inhabitants nothing but obee\* in the room of rice or bread; if they want paddee, they must have recourse to Boele Comba, or Bima. It has some woods, from which the inhabitants, and those of Boele Comba, obtain

for anchoring. The highest land in sight is called Bontain Hill; and when a ship is in the offing, at the distance of two or three miles from the land, she should bring this hill north, or north half west, and then run in with it and anchor. In this bay there are several small towns; that which is called Bontain lies in the north-east part of it, and here is a small palisadoed fort, on which eight guns are mounted, that carry a ball of about eight pounds weight: it is just sufficient to keep the country people in subjection, and is intended for no other purpose; it lies on the south side of a small river, and there is water for a ship to come close to it. Wood and water are to be procured here in great plenty; likewise plenty of fresh provisions, at a reasonable rate; the beef is excellent, but it would be difficult to procure enough of it for a squadron. Rice may be had in any quantity, so may fowls and fruit; there are also abundance of wild hogs in the woods, which may be purchased at a low price, as the natives, being Mahomedans, never eat them; and fish may be caught with the seine. The latitude of Bontain Hill is five degrees thirty minutes south. The tides are very irregular; commonly it is but once high and once low water in four-and-twenty hours, and there is seldom six feet difference between them. T.

\* *Panicum corvix*



middling good timber for building proas: the chief building yards of the Macassers were formerly at this place\*.

The men of Bera are in general good warriors, both at sea and at land; the richest among them are merchants; the others employ themselves in building of proas, and in manufacturing a sort of coarse white cloth, from the cotton which grows in tolerable abundance here; a small annual tribute of these cloths is paid to the Company.

This country has ten regents, of whom the chief is Crain Bera. These come once a year to Fort Rotterdam to discharge their tribute.

CHAP. XIII. — *Account of the Island Saleyer. — Its Productions. — Government. — Character of the Inhabitants. — Islands of Bonaratte and Calauwe. — Intricacy and Difficulty of the Government of Macasser. — Contract, or Treaty, of Boni. — Mistaken Policy of the Company. — Declining State of their Authority. — Encroachments and clandestine Trade of the English. — Difficulty of preventing them. — Alarm excited at Macasser by the Arrival of Captain Carteret, in 1768. — Account of that Affair. — Bad Consequences of the Second never succeeding to the Governorship. — Emoluments of the Governor at Macasser. — The other Servants of the Company. — The Company's Trade. — Private Trade. — Impossibility of preventing Smuggling. — Opinions of Governor Mossel on these Subjects. — Receipts and Charges of this Settlement. — Memorial of Mr. Van Pleuren on the Trade of the Company. — Establishment of Macasser. — Malays. — Their Chief or Captain. — Trade of the Chinese to Celebes. — Description of their Junk. — Departure from Macasser.*

THE island Saleyer lies nearly south of the point of Lassem, full two leagues, in the strait between them are the Budjeroons, called by our seamen the Boeseroens, which are three small, uninhabited islets.

There are several other islands which lie round and near Saleyer, and belong to it, of which however only two are inhabited, namely, Bonaratte and Calauwe.

The Macassers, who had possession of Saleyer, made a cession of it, by the treaty of Boni, to the King of Ternate; but it has since, in the lapse of time and by slow degrees, been wrested from the Ternatefe, by the Company.

Saleyer is very mountainous and woody, and there are many deer in its forests. It produces obee and batta: the last is a sort of millet, which constitutes a chief part of the food of its inhabitants. Much coarse blue and white striped cloth is made here of the capas, or cotton, which it likewise produces†.

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\* They build their proas, which they call paduakans, very tight, by dowling the planks together, as coopers do the parts that form the head of a cask, and putting the bark of a certain tree between, which swells, and then fit timbers to the planks, as at Bombay; but do not rabbet, as it is called, the planks, as is done there. In Europe we build reverfely; we set up the timbers first, and fit the planks to them afterwards. They are bigotted to old models and fixtures in fitting their vessels. The largest never exceed fifty tons. They have their bow lowered, or cut down, in a very awkward manner, so as to be often under water; a bulk-head is raised a good way abaft the stem, to keep off the sea. They have a tripod mast, with a high pointed sail: the tripod mast is made of three stout bamboos; two rising from the sides, and one from the fore-part of the vessel, lashed together at the top: the two feet abreast are bored at the lower end across, with holes about three inches in diameter; and these holes receive the two ends of a piece of timber, which goes across, like a main thaft; on these the two abreast parts of the tripod turn, as upon a hinge: the fore part of the mast is fixed forward like a mainstay, to a knee a-midships, with a forelock; by unlatching the forelock, the mast is struck in a moment. &c.

† Captain Forrest, who was cast away, in the Bonetta ketch, on a small, desert, sandy island, east of Saleyer, sailed across the latter in 1763, accompanied by the resident. They were carried by men up the



This island is governed by fourteen regents, who resort once a year, in the month of October, to Fort Rotterdam, with two hundred and fifty or three hundred of their countrymen, to perform the customary duties of vassalage, and to set forth such disputes as they may have among themselves, in order to obtain a decision in them.

This people are pusillanimous and servile, and, at the same time, quarrelsome and perverse; insomuch, that if their situation be not exactly to their own liking, they immediately emigrate with the whole of their family to another country.

A junior merchant is placed here as resident in behalf of the Company, who has his abode near or in a palisadoed pagger, or redoubt, called Defence, which lies, as I was informed, in five degrees south latitude.

The before-mentioned islands Bonaratte and Calauwe were given in fief to the old Radja Palacca. He made use of the first for a place of education and instruction for his dancing girls; to which purpose his successors in the kingdom of Boni likewise appropriated it; hence these islands are mostly inhabited by Bouginese, and but very few Saleyers are found upon them.

From these short sketches and descriptions of the nations who inhabit the great island of Celebes, may easily be deduced the different relations, in which they stand towards each other, and towards their neighbours, both with respect to their internal policy, and their foreign connections; and hence may likewise be seen, how intricate and troublesome the office of governor of Macasser must be, in order to reconcile the jarring interest of all these numerous petty states with each other, and with the interest of his employers.

The contract, or treaty, of Boni, which has been so often mentioned in the preceding pages, was the foundation upon which the superstructure of the Company's power and influence in Celebes was erected more than a century ago. Boni, who first entered into this engagement, and whence it has always been called the contract of Boni, has for that reason been ever esteemed the first and oldest ally of the Company. It was at that time in danger of being subdued by the Macassers; and not possessing sufficient power to oppose so redoubted an enemy, it may therefore be easily conceived that the Bouginese readily embraced the opportunity of entering into the strictest alliance with the Company, whose power was so great, and so renowned throughout India, that whoever were their allies might divest themselves of all fear of being mastered. This was in fact apparent in the sequel. Macasser was subdued, and Boni, being thus freed from the fear of their hereditary adversaries, increased more and more in greatness and lustre, more especially during the government of Radja Palacca. It became an adopted political maxim, that Macasser should be continually kept under; and this has been till the present time so strictly adhered to, that Boni has been rendered so great and powerful, that it is at present out of all question to prescribe rules or bounds to that kingdom, although the mistake is now most clearly perceivable: it even happens from time to time, and every year, that different portions of territory, which appertain to the Company by right of conquest, are suffered by the negligence or indulgence of the governors to be wrested from them by Boni, under some plausible pretext or other; while these encroachments are likewise afterwards unaccountably ratified by the government at Batavia.

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the very steep hills, that run along the middle of the island from north to south, on bamboo chairs, made on the spot; and they went over the flat lands on horseback. He computes the inhabitants of Saleyer to amount to about sixty thousand. They drink much of a liquor called saguire, drawn from the palm-tree: they burn tallow from the tallow-tree, as in China. Tr.

The present sovereign of Boni has brought it so far that one of his grandsons has ascended the throne of the powerful kingdom of Loehoe, and which the Company have been obliged to wink at; perhaps the danger to their interests, which lies in this vast increase of the power and influence of the Bouginese monarch, has not been sufficiently insisted upon by their servants, or it may even be, that it has been represented in a favourable light.

Hereby, and by several other circumstances, the authority of the Company has so much declined in Celebes, that their possessions in the island may be considered as very inferior in importance to others. Little regard is now paid to the treaty of Boni, upon which every thing hinged heretofore. The King of Boni has even presumed to prefer a claim upon the campon Baro, close to the fort, because he resided for some time in it, when he had fled to the Company for protection against his sister Aroe Palacca. It is not impossible, that when this prince is dead, other darker clouds may arise: for this is certain, that all the native princes are jealous of the footing which the Company have obtained upon the island, and envy them their possessions; and if they could but remain united among themselves, they would not let slip any opportunity of freeing themselves from their dependence, by expelling the Dutch from Celebes, or at least curtailing their power and influence. This it is what constitutes the most important, as well as the most difficult and delicate, part of the administration at Macasser, namely, to inspire the principal nations with jealousy and distrust of each other, at the same time preventing and avoiding, as much as possible, all actual hostilities and interference, in order not to be forced to join either one or the other.

The Company are not only menaced on this side, but their hereditary rivals in trade, the English, seek likewise to establish themselves here, which they had nearly effected, about the river of Sadraboni, a few years ago. The Bouginese, Wadjorese, and Mandharese are much attached to them, and assist them in the purchase of spices from Ceram and other islands. Their new establishment at Balambangang gives them opportunities of connection with the merchants and other individuals of the different nations who resort to Passir and Soeti, or have settled there, and of drawing them over to their interests: and if they were to persevere in their endeavours, it would be very difficult to prevent them from obtaining a footing in Celebes; especially upon considering what happened with respect to the little English sloop of war, the *Swallow*, in 1768, whose stay at Macasser I mentioned in my former voyage; and though the circumstances attending it, were contradicted to me now that I was at Macasser, it was in such a manner as rather confirmed my belief in the credibility of Captain Carteret; if a little sloop of twelve guns, with a sick and exhausted crew, was enough to cause such an alarm, what would be the event if a greater force were to appear in these seas\*.

If

\* When Captain Carteret reached Macasser, from the South Seas, his ship's company were in a dying condition, and it was in order to procure refreshment for them, and shelter against the approaching bad monsoon, that he touched there. His arrival excited the greatest alarm, and all the sloops and vessels that were proper for war were fitted out with the utmost expedition. He, however, thought to have been an overmatch for their whole sea force, had all his people been well; but they were so reduced, that a boat having been dispatched on shore, the united strength of the remaining men was not sufficient to weigh the anchor, though a small one, in order to proceed nearer to the town. As soon as it was known who he was, he was commanded, by a letter from the governor, "instantly to depart from the port, without coming any nearer to the town; and not to anchor on any part of the coast, or permit any of his people to land in any place that was under the governor's jurisdiction;" and notwithstanding all his remonstrances, and ocular demonstration of the emaciated and distressed state of the crew, the short and final answer of the deputies of the governor, who brought the letter, was, "that they had absolute and indispensable orders, from

If there be any government among the Company's possessions, that requires a chief who is a man of knowledge and of sound judgment, vigilant and zealous in discovering every machination and design that are concerted in the surrounding kingdoms and provinces, it is that of Macassar. As these qualities are seldom found in such persons as are raised to the head of affairs from the desk, or other employments which have no affinity with the art of government, it is evident that their administration cannot but be productive of the most prejudicial consequences; and, for my own part, I entertain no doubt that there have been governors sent thither from Batavia, who have never become acquainted with even the names of the greatest part of the nations with whom they had to deal, much less with the various and intricate connections subsisting between them and the Company.

I think it a radical defect in the management of the Company's affairs, that scarcely ever the second person, in any administration, succeeds to the office of chief governor, in the settlement to which he is attached. He must incontrovertibly possess more local knowledge than one who only knows the place by name, and who has never assisted at the deliberations of the local council. Yet the mode which I condemn is so universally adopted, that it must even be surmised to be a maxim laid down by persons in high authority, the motives of which it is impossible to divine.

At the same time, the government of Macassar not being a very lucrative one, the governors seldom wish to remain long in it; and they do not, therefore, take much pains to dive deep into the knowledge of affairs, each thinking that it will last his time.

Besides what the Company allow the governor out of the profits upon trade, and the territorial revenues\*, there are other private advantages, which help to make out his otherwise inconsiderable income. In the first place, the collection of the tenth of the produce of the earth, at which the governor is present, one year in the northern, and the other year in the southern provinces. Secondly, the yearly letting out to farm the duties on articles of consumption, for a preference in which two or three thousand piasters are generally given as a present. Thirdly, presents are likewise given to the governor when vacancies occur among the petty kings of the opposite islands by their successors, to procure his favour. In the fourth place gifts are likewise offered by

from their masters, not to suffer any ship, of whatever nation, to stay at that port, and that these orders they must implicitly obey." To this Captain Carteret replied, that persons in their situation had nothing worse to fear than what they suffered, and that therefore if they did not immediately allow him the liberty of the port to purchase refreshments, and procure shelter, he would, as soon as the wind would permit, in defiance of all their menaces, and all their force, go and anchor close to the town; that if, at last, he should find himself unable to compel them to comply with requisitions, the reasonableness of which could not be controverted, he would run the ship aground under their walls, and after selling their lives as dearly as they could, bring upon them the disgrace of having reduced a friend and ally to so dreadful an extremity. It was not till after he had begun to put his threats in execution, by getting under sail, and proceeding towards the town, that a treaty was entered into with him, by which, after much altercation, he was permitted to go to the bay of Bontain, in order to procure the necessary supplies of provisions and water, to erect an hospital for his sick, and to find shelter from the bad monsoon, till the return of a fit season for sailing to the westward. *Tr.*

\* The Dutch Company supply their eastern settlements with the cloths of Indostan at 33 $\frac{1}{2}$  per cent. advance on the prime cost; whatever they sell for more is the profit of their servants. Five per cent. for commission and del credere on the sale of all articles, is divided between the governor and the second at Macassar; the former has likewise an allowance of £3000 (about 2751. sterling) per annum, to make good the expence he is at in entertaining the native princes and grandees. *Tr.*

others,

others, upon his coming to the government; as for example, by those of Bera, who are obliged to present him with a new proa, made in respect to size and shape according to prescribed rules, and such as, being sent to Bima, or Sumbawa, sometimes fetches fifteen hundred piafters. And others of less importance; the mode of obtaining which is not known to me.

The other head servants in the Company's employ, at this place, consists of the following officers:

The vice-governor, or second, who has the title and rank of senior merchant. The trade that is carried on here, chiefly relates to his department. He is at the same time commercial book-keeper, and has an assistant, who writes the Company's ledger. As is customary in all the Company's settlements, the second in command is president of the council of justice, and of other boards. All his offices, however, put together yield but little. Mr. Van Pleuren, who had filled this station for eight years, assured me more than once (and I have no reason to doubt what this worthy man told me in this respect, having heard it confirmed by several intelligent and uninterested persons), that taking one year with another, his income had not exceeded five hundred rix-dollars, or twelve hundred guilders, per annum, for the whole time he had been the second at Macasser. This sum might, indeed, easily have been quadrupled by unlawful means; as by receiving presents, in the quality of president of the council of justice; by giving undue preferences to Chinese merchants, or others, in the disposal of the Company's piece-goods; by winking at monopolies in trade; and by other evil means, which are sufficiently notorious.

The commander of the military is the third in order; he has the title and rank of senior merchant.

Next follow the shebandar, or master of the port, and the fiscal, who are both merchants in rank.

The secretary of police and cashier, the winkelier, or purveyor, the resident of Boele-combe and Bontain, the resident of Maros, and the soldy-boekhouder, or pay-master, are junior merchants in title and in rank, and these, together with the preceding officers, form the council of polity.

The resident on the island of Saleyer, has the rank of book-keeper, equally with the first interpreter in the Macasser and Bouginese languages; the latter was at that time thought a very good office; he has two assistant interpreters under him.

To the military belong further, two lieutenants and six ensigns; of which last, one is commandant at Bima.

The lieutenant of the artillery is at the same time fabriek, or inspector, of the fortifications and buildings, and may, in certain points, be here considered as engineer.

The equipment of, and control over, the Company's vessels, which consist of ten or twelve panchallangs\* and sloops, employed in cruising along the coast, in order to prevent smuggling, are vested in an inspector of equipment, who has the rank of sea-lieutenant.

The Company's trade here consists chiefly in the sale of piece-goods, especially of coarse cloths, which are, therefore, prohibited to be imported by private traders. At the time of Governor Mossel, that is, in the beginning of his government, 1752, he calculated that the yearly amount of the piece-goods sent to Celebes, was one hundred

\* Country vessels, with one mast and a large pointed sail. Tr.

thousand gilders, upon which the profits were estimated at forty thousand; but as the contraband trade with the English has greatly increased since that time, and the orders from Batavia for cloths have not been properly executed, with other additional influencing circumstances, this vent and the consequent profits, are much curtailed.

“It is so impossible,” says Mossel, in his State of India, “to prevent smuggling at Macassar, on account of the many creeks and inlets of Celebes, which afford opportunities for a contraband trade, that I hold it expedient and necessary that all private trade from the Spice Islands thither cease and be prohibited.” This private trade, however, is continued as heretofore, at least to Amboyna and back.

This free or private trade is chiefly carried on from Macassar to Amboyna and Batavia in rice, slaves, tripangs, and the cloths which are made there; from Amboyna back specie is mostly brought; and from Batavia provisions and such piece-goods as are not prohibited.

The little that the Company draw from Macassar and its appurtenances consists in sapan-wood of Bima\*, and some cadjang. A ship is, at present sent thither every year, which carries a cargo from Batavia, in the month of March or April, and returns to the capital of India, by way of Bima and Sumbawa.

Governor Mossel was of opinion that this expence might be avoided, as the necessary supplies for the settlement at Macassar might be sent by the ship for Banda, which calls there for rice, and the Bima sapan-wood might be fetched away by the ship annually returning from Ternate; while the slaves which the Company require for their own service from Celebes, might be dispatched to Batavia by the vessels employed in the private trade, for which a contract exists between the Company and the free merchants, but which is not now availed of; according to which sixty rix-dollars, or one hundred and forty gilders per head, is agreed to be paid by the Company for the conveyance of slaves to Batavia.

That gentleman further calculated the clear receipts of the Company, at the time, at eighty thousand gilders; in which sum were included the excise and custom-duties, with the territorial revenues, which were taken at forty thousand gilders.

I cannot determine whether any diminution has taken place in the latter since the year 1752; but the forty thousand gilders profits, which were then made by the Company upon the trade in piece-goods, and upon opium, liquors, and other articles of importation, have undergone great alteration to the disadvantage of the Company; as at present Celebes is provided with the two first articles in no inconsiderable quantities, by the contraband trade of the English; and it is not without reason, that

\* In 1778, 580,000lb. Bima sapan-wood was sold in Holland at  $f.15$  per 100lb. (equal to about 28s. per cwt.); and upon this article the profit is supposed to be between fifty and sixty per cent.; which, however, is scarcely more than enough to cover the charges of conveyance to Europe. In April 1769, the King of Siam, whence the Dutch used to receive much sapan-wood, but the trade to which country they had abandoned for some time, sent a letter to the government at Batavia, informing it that tranquillity was again restored there, and that Siam had recovered from the ravages of the Avaneze; requesting, at the same time, that the Company would re-establish their factory, and that they would furnish him with one thousand muskets. To the first point an answer was given, that the Company could not yet accede to his desire; and as to the second they sent him five hundred muskets, stipulating that their price should be paid in sapan-wood, at  $f.3$  per picol of 125lb. or, if need be, in wax, at the current rate of the day. The Siam sapan-wood would thus stand the Company, with freight, &c. in  $2\frac{1}{2}$  rix dollars per picol, at the highest, or  $f.4.16.$  per 100lb., and the rate at which the Macassar sapan-wood was sold, as abovementioned, was  $f.15$  per 100lb. But it does not appear that this article has, since that time, been procured from Siam. Tr.

apprehensions are entertained that that enterprizing nation will endeavour to prosecute it more and more, as they are now almost the sole masters of the trade in piece-goods from Bengal, and they seem to aim at establishing themselves likewise in the eastern parts of India. Yet the Company's charges do not decrease in the same proportion with their receipts: it is true, that by the good management of Mr. Van Pleuren, in the concerns committed to his care, the charges have been lowered thirty-three thousand gilders in the space of eight years, and in the last year he reduced them even to three thousand gilders below the latest memorial of œconomy: but what can this avail, if we consider that by the above means the profits have been reduced by one half, and perhaps more, and that Macasser is yet a losing establishment to the amount of upwards of eighty thousand gilders a year; while it cannot be expected that all who succeed Mr. Van Pleuren in his office shall equal him in integrity, and shall sacrifice their own interest to promote that of their employers\*.

The memorial drawn up by the above-mentioned Mr. Van Pleuren, for the improvement of the Company's trade in Celebes and the opposite islands, seemed to me to be a judicious and elaborate composition. The chief point on which he insisted, was the prevention of the clandestine trade of the English, and the reduction, under the Company's influence, of Salemparre, a kingdom whose Prince is attached to the English, and has always refused to become the ally of the Company; for he would thereby have obliged himself not to suffer any other nation to resort to his dominions, against which he most strenuously objected, alledging that his country was open to all strangers who behaved with propriety, and regularly paid him his duties.

When the establishment is complete at Macasser it should amount to eight hundred Europeans†; but this number is not nearly complete, on account of the great mortality on board of the Company's outward-bound ships, by which means fewer men are brought to Batavia than are wanted, and they are considerably thinned by the unhealthiness of that place, and of Bantam, whereby not only Macasser, but likewise almost all of the Company's possessions are in want of men.

Besides the Europeans, the Company have, in time of war, a great number of Malays in their service. These people, who have emigrated in the sixteenth century from Johore, Patanee, and other places on the Malay coasts, and have settled themselves here, dwell in a sort of town, separate from the Bouginese, which is called after them Campon Maleyo. They are under one captain, or chief, who is nominated by the Company. They have always been inseparably allied to the Company, and have rendered them very signal services both by sea and land.

The Company have given the island Tanakeke to their captain, for his use. He came on board of my ship, with his brother, in order to accompany Mr. Van Pleuren as far as the point of Tourattea: he appeared to me to be a peculiarly friendly and open-hearted man, and they both possessed much sensibility; for when they took their last leave of Mr. Van Pleuren the tears rolled down their cheeks; they told me aside, that they lost in him their best friend and benefactor. Indeed, I heard the same a few days before he went away from Macasser from many others, both Europeans and Indians, who sincerely lamented his departure, as that gentleman had made himself universally beloved, by his great affability and his generous disposition.

\* In 1779 the receipts of this government amounted to *f*.63,190, and the charges to *f*.163,137, leaving a deficiency of *f*.100,053, or about 9100*l*. sterling. TR.

† In 1776-1777 the establishment at Macasser consisted of 57 persons in civil, and 3 in ecclesiastical employments, 13 surgeons and assistants, 27 belonging to the artillery, 178 seamen and marines, 502 soldiers, and 72 mechanics; in all 852 Europeans. TR.

The Company have, for many years, allowed a Chinese junk to come here, direct from China, every year, to bring thither the goods which are exported from that country, and which otherwise would be clandestinely introduced into the island by that intriguing nation, whom it would be impossible to exclude; and the Company's customs are now benefited by it, as, if I am rightly informed, every junk pays three thousand Spanish dollars in duties. The passes for those vessels are granted by the government at Batavia, where they are obtained by the chief of the Chinese nation, who sends them over to the merchants in China, and for which it is said that he receives full eighteen thousand rix-dollars\*.

As soon as these goods are landed, every merchant, for there are several of them who come in such a junk, exposes his commodities for sale in a large house, which is peculiarly adapted for that purpose. This house is the daily resort of a great number of people, particularly Macassers, Bouginese, and Wadjorese, so that the merchandize imported is speedily disposed of.

These merchants take in return tripangs, and Spanish dollars, both which render them good profit in China; and they are generally able to obtain forty thousand dollars, as the governor here Mr. Van der Voort assured me†.

On my former voyage, when I was at Batavia, I wanted very much to have seen the inside of a Chinese junk. These are called here wankon, and as there was one lying alongside of my ship in the road, I took the opportunity of gratifying my curiosity.

\* About 3900l sterling. Tr.

† Some judgment may be formed of the trade carried on by the Chinese to the eastern islands, from the following curious and interesting statement of the outward and return cargoes of a Chinese junk, from China to Sooloo, an island, or rather an archipelago of islands, north of the Moluccas, as given us by the intelligent Captain Forrest.

“List of articles that generally compose the cargo of a Chinese junk, of which two come annually from Amoy to Sooloo:

	Cost in China.	Selling Price at Sooloo.
“ 2000 Galangs (salvars of brags), seven to a picol . . . . .	dollars 40 . . . . .	70
100 Picols iron, in small pieces like Bengal iron . . . . .	4 . . . . .	8
Sugarcandy, a quantity, per picol . . . . .	7 . . . . .	10
50 Raw silk, ditto . . . . .	400 . . . . .	600
3000 Pieces black kowfongs, a kind of nankeen, per piece . . . . .	0½ . . . . .	
500 Pieces kompow, white strong linen . . . . .	0½ . . . . .	1
500 Kangans, twenty-five in a bundle, called gandangs, per gandang . . . . .	7 . . . . .	10
200 Quallis, an iron thin pan, three feet diameter each . . . . .	1 . . . . .	2
500 Nets of quallis, three in a net . . . . .	1 . . . . .	2
1,000,000 Pieces chinaware, per hundred . . . . .	1 . . . . .	2
200 Pieces of flowered silks . . . . .	6 . . . . .	10

besides tea, cutlery, and other hardware, brags wire, gongs, beads of all colours, fireworks, &c. &c.

“The returns are in the following articles:

	Cost in Sooloo.	Selling Price at China.
“ Black swallow, per picol . . . . .	dollars 15 . . . . .	30
White ditto . . . . .	10 . . . . .	20
Wax . . . . .	15 . . . . .	25
Teepye, or pearl oyster-shells . . . . .	1½ . . . . .	5
Birds' nests, per cattí . . . . .	6 . . . . .	9

“Also tortoise-shell, agal agal, a sea-weed used as gum, or glue, and many other articles; such as carooang-oil, clove-bark, black wood, ratans, sago, various barks for dyeing, cassia, pepper, native camphor, sandal-wood, curious shells for grottos, pearls, seedpearl, and spica.”

FORREST'S Voyage to New Guinea, and the Moluccas, p. 325. Tr.



As soon as I came on board, with the company that were with me, we were received with great politeness by the Chinese chiefs, and tea, confectionery, and fruits were set before us, previous to our taking a view of any thing. This vessel carried three masts, of which the largest and middlemost was nearly of the same thickness as the main-mast of my ship the *Ouwerkerk* (a ship of one hundred and fifty feet in length), and it was made of one entire piece of timber. The length of the junk, from the exterior of the stern to the extreme point of the head was, according to my computation, one hundred and forty feet. The hull was separated into as many different divisions as there were merchants on board, each having a distinct place to stow his commodities in. The water was likewise distributed in several reservoirs, and being started in bulk, was drawn up by buckets through hatches which opened in the deck. The furnace for cooking was by the larboard side of the main-mast upon the deck; for these vessels have but one deck; and we saw the victuals dressed there, in a much cleaner and neater manner, than is practised on board of European ships. At the stern were several tiers of little cabins, or huts, made of bamboos, as well for the officers of the vessel as for the merchants. Exactly in the middle between these was the steerage, and in the center of it was a sort of chapel, in which their joss, or idol, was placed; they bring every year a new one with them from China, which is then placed in their temple, and the old one of the former year is taken away, and carried back to China; and they never begin to land any part of the cargo until the image of this idol, which is made of gold, and is about four inches high, has been sent on shore out of the junk; both on board and on shore they continually burn lights and incense, and in the evening some silver paper, before the idol. The rudder is not attached to the vessel by pintles and goosings, but it is hung in ropes made of cane, and is very different in shape from those we use. Their anchors are crooked pieces of timber, to which heavy stones are tied to make them sink. The whole of their tackling, both cordage and sails, is made of cane.

On the 15th of February my ship's company were mustered by the fiscal and deputies from the council of justice of Macassar. Thirty-one hands belonging to the ship were left behind here in the hospital, most of whom were afflicted with bad ulcers on the legs, and had not been properly treated by the ship's surgeon, as the surgeon of the place gave us to understand; we received on board, in their room, seventy-six other European sailors.

The following day, at half past seven in the morning, Mr. B. Van Pleuren, with his lady and two children, came on board, being, by appointment of the supreme Indian government, of the 7th of November 1774, made governor of the province of Amboyna, after having had the chief administration as second of the government of Macassar.

The ceremonies which were observed on the occasion of his departure were as follows: at half past six o'clock the governor of Macassar Mr. P. G. Van der Voort, with all the members of the council of polity, those who were married being accompanied by their ladies, came to the house of Mr. Van Pleuren, in order to conduct him to the pier-head, where he was to embark, the garrison being in the meantime under arms, and the drums beating a march: after having taken some refreshments, the former walked with Mrs. Van Pleuren, and the latter with Mrs. Van der Voort, followed by all the members of the council, from the fort to the pier, where a boat lay ready to convey Mr. Van Pleuren, his lady, his children, and the deputies from the government, on board. As soon as the boat put off, a salute of twenty-one guns was fired from the fort, which was answered by the Company's bark, the *Moffel*, which was likewise destined to go to Amboyna, with nineteen, and by the other vessels,

both

both those belonging to the Company, and those of private persons, with a lesser number.

When Mr. Van Pleuren and his company were on board, a salute of twenty-one guns was fired by the *Ouwerkerk*, and at the last gun the flag was hoisted at the mast-head. We shortly afterwards weighed anchor, and steering between the reef of Great Lyly and the rock, we saluted the fort with one-and-twenty guns, and were answered with the same number: in half an hour afterwards, having got out to sea, the deputies from the government returned on shore, and we saluted them with nine guns.

CHAP. XIV. — *Passage to Amboyna. — Strait of Tanakeke. — View of Bontgin. — The Island Saleyer. — The Budgeroons. — Proposal for fortifying them. — View of the Islands Cabync — Passangane — Bouton. — Account of the latter. — Contract of the King with the Dutch. — Extirpations of Spice-trees. — Dangerous Passage between Bouton and the Toucan-bessis. — Dwaal, or Mistake-bay. — View of the Island Bourou. — Account of it. — View of the Island Amblauwe. — Of Amboyna, and six of the Islands belonging to it. — Strange Neglect with respect to Signal-flags. — Short Account of the Bay of Amboyna. — Anchorage in it. — Ceremonies upon the Arrival of the new Governor.*

AT three o'clock, P.M. we were constrained by contrary winds and currents, to come to an anchor close to the island Galissong, where we lay that night.

The next day, being the 17th of February, we weighed anchor at daybreak, and set sail, steering along the coast of Celebes, for the passage of Tanakeke, which we reached at ten o'clock, and about eleven we had passed the narrowest and most dangerous part of it.

The space between this island and that of Celebes, is, of itself, large enough, but the passage is narrowed, by more than one half of the distance over, by a reef which stretches out from Tanakeke towards Celebes, and by a sunken rock, which lies about half a league south-west from the point of Sandraboni. The depth in the passage is from twelve to ten fathoms. At sunset we had doubled the south-west extremity of Celebes.

At sunrise, on the following morning, we were abreast of Bontain, which is remarkable by its very high hills, being the termination of the range of mountains running through Celebes from north to south. At the same time we came in sight of the island Saleyer, and steered for the point of Lassoa, which is the southernmost land of Celebes. In the afternoon we saw the Budgeroons lying east of us.

These are three small islands, which lie nearly in a line, in the direction of north-west and south-east. They almost entirely block up the passage between the southern part of Celebes, and the northern part of Saleyer, the whole space between which is about a league and a half. The northernmost and southernmost of these islets lie, respectively, so close to the point of Lassoa, and to the north end of Saleyer, that there is no passage for ships between them and the larger islands, and not even for small vessels, but attended with danger; they therefore pass this strait between the southernmost and middlemost, or between the latter and the northernmost of the Budgeroons. Both these passages seemed to me, by the eye, to be about three-eighths of a league in breadth. The shores of the middlemost island are perfectly clear all round, and so very bold that there is no soundings with a line of one hundred fathoms.

This.

This is one of the most dangerous parts of the navigations for ships sailing to or from the Moluccas, or the spice-islands, and there is no avoiding it without going round to the south of Saleyer, which is a much more hazardous route, on account of the great number of shoals and funken rocks which abound there, and are either not laid down, or placed extremely inaccurately in the charts; though I know of a recent instance of a Company's ship, which was obliged to take that route, having been driven to leeward by the currents.

For this reason, I am surprized that the Company have not erected a few good batteries, provided with heavy artillery, upon the middlemost of the Badgeroons, in order to block up this passage to foreign vessels, which must sail close under this island, and would, therefore, be forced to run under the guns of the batteries, whilst they would have enough to do to work their sails, and would not be able to return the fire. The objection which might be made to this plan, namely, that this spot does not afford any thing for the subsistence of the men who might be placed there, and perhaps not even that most necessary of articles, fresh water, is easily obviated, for the Company's residencies of Boelecomba and Saleyer, could constantly provide those who were garrisoned here, with every thing they wanted; besides, many men would not be required, for there could be no danger of ever being obliged to resist the attack of an enemy upon the island; for it would be impossible for a boat to land if there were any battery upon it.

As soon as we had come within two cables' length of the middlemost island, in order to pass between it and the northernmost, we were encountered by a strong current setting with the utmost violence to the westward, so that we were obliged to assist the steering of the ship by manœuvring with the sails. The current ran with such force, that although we had a stiff gale nearly aft, and the ship seemed to advance upon the water full five leagues, we made, in effect, little or no progress towards getting through the strait. In about half an hour, however, the current decreased, and eight o'clock, P.M. we had cleared this dangerous passage, and steered for the island of Cabyne.

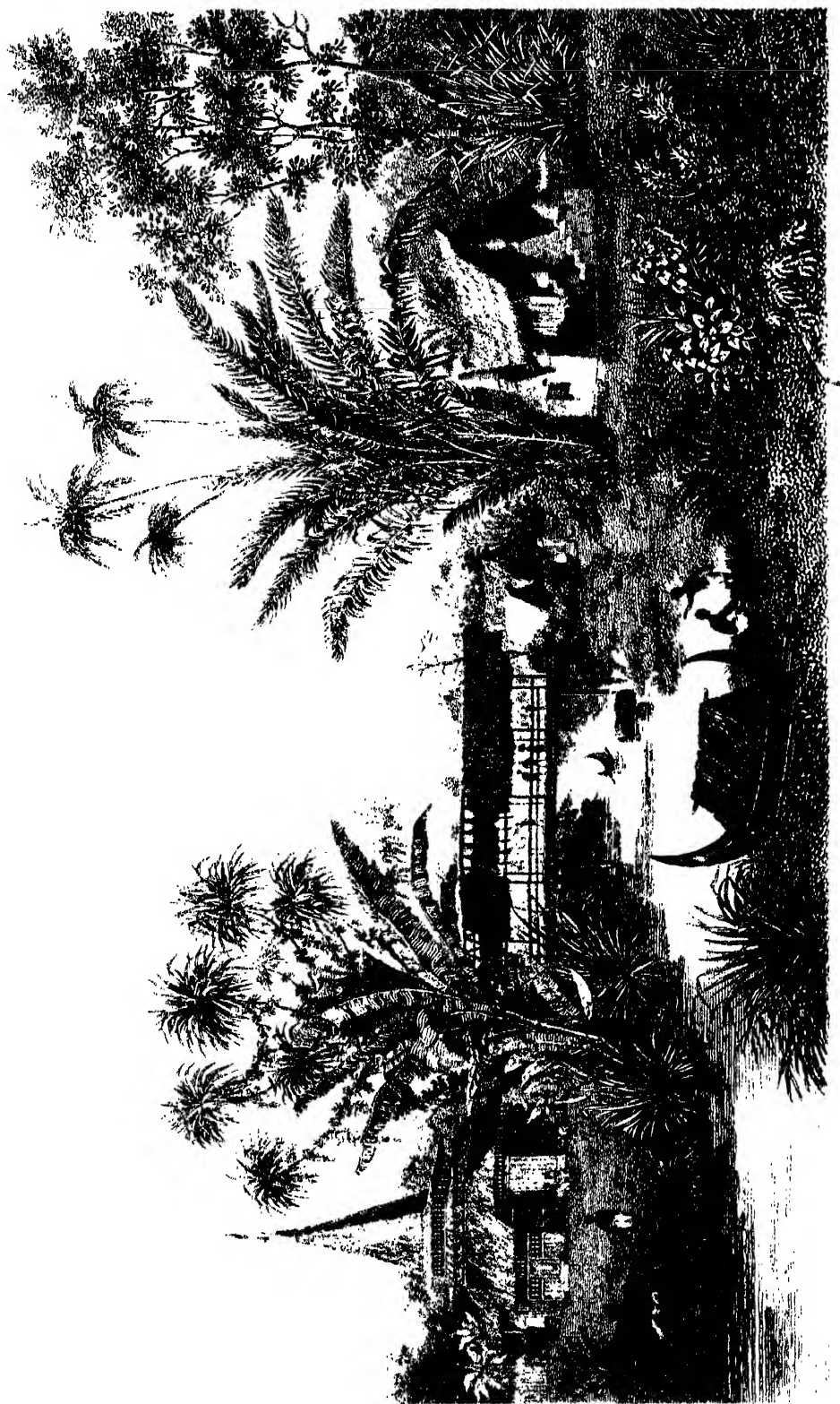
In the mean time, a small vessel, which had been dispatched by the resident of Bontain and Boelecomba, with refreshments for Mr. Van Pleuren, came alongside of us, while we were struggling with the force of the current; there was the greatest danger of its being stove to pieces against the ship's side by the violence of the uppling, and the Indians who were in it cast off the rope, and we thereby lost one of our sailors, who had been ordered into the boat to assist in handing over the things they brought. As soon as the vessel fell astern she steered for Saleyer, and we very soon lost sight of her.

On the following morning at sunrise, we saw the island Cabyne, bearing east-north-east and east by north, eight or ten leagues: we were still likewise in sight of the coast of Celebes, and of the island Saleyer. We steered for the southern point of Cabyne; but we were prevented by calms from coming abreast of it till the 21st of February, when we also got sight of the islands Passangane and Bouton, which form the straits of Bouton.

Bouton is a large, middling high, and woody island. It is a kingdom of itself, to which the neighbouring islands likewise belong. The King of Bouton is in alliance with the Company, who pay him a yearly sum of one hundred and fifty rix-dollars in new Dutch coin, upon condition that he should not only permit the extirpation by the Company of all the clove-trees in this and the neighbouring islands, but also assist them

in





in effecting it. For this purpose the Company annually send out a serjeant, who is styled the extirpator, and who goes through the woods in all the islands, and causes all the clove-trees which he meets with to be cut down. The King of Bouton is obliged to provide him guides and interpreters, as likewise with vessels, if he stand in need of them. But, as for several years, he has been very negligent in fulfilling his engagements, and has several times, upon various pretences, hindered the extirpator in his search after the spice-trees, the government in India have thought fit to withhold the abovementioned pecuniary allowance this year, in order to try, by that means, whether the fear of losing this annual revenue (for one hundred and fifty rix-dollars, or three hundred and sixty gilders\*, is really a considerable sum in the treasury of this prince) will not suffice to make him stick more closely to his contract, and be more active in assisting the Company to destroy this rich production in his country, for the benefit of Amboyna and Banda.

By the calm weather which accompanied us from Cabyne, till we were without the Toucan-bessis, which is a distance that is commonly sailed over in one day, or in a day and a half, it was not till the 26th of February that we could accomplish this part of the navigation. We had no violent currents, either for or against us, though we met with some, but they neither held any regular course, nor did the moon seem to have the least influence upon them.

The passage between the island Bouton and the Toucan-bessis is the second dangerous part of the navigation for ships going to the Moluccas, or spice-islands. The channel is, it is true, wider than that of the Budgeroons, for, by my calculation, it is about four leagues over, from the nearest part of Bouton to the westernmost of the Toucan-bessis, but the danger is of longer duration, by the numerous little islands which form the cluster called the Toucan-bessis, all of them either connected or surrounded by rocky shoals, over and between which very rapid currents set strongly to the eastward: a great and dangerous flat called the Hoefzyzer, or Hoessehoe, lies one and a half, or two leagues south of them, upon which many vessels of the Company have been wrecked.

Along the shore of Bouton, there is, indeed, no danger to avoid but the land itself, but in the narrowest part of the passage begins a large bay, which runs into the land, west and north, into which there is much danger of being drawn by the currents which set into the bay, if the point opposite to the Toucan-bessis be approached too near in calm weather; and if you have once fallen into the bay, there is no getting out till the west monsoon sets in again, and it may even be considered a fortunate circumstance to succeed in getting out then: some of the Company's ships that have been drifted in, have been five or six months before their repeated attempts to get out have succeeded; and among other instances, when Mr. de Clerk went as governor to Banda, he was detained a whole year in this vexatious gulph, before he could prosecute his voyage; our navigators have, on this account, given it the appropriate name of Dwaal, or Mistake-bay.

The two principal of the Toucan-bessis islands lie, by the eye, about half a league north-north-east and south-south-west from each other; I saw the northernmost, which is the highest, at the distance of nine leagues; they are inhabited by a people who do not suffer any strangers, and especially no Europeans among them.

On the evening of the 1st of March, at sunset, we discovered the island Bouro, bearing east-north-east full thirteen or fourteen leagues off by computation.

This island is of an oval shape, the longest diameter of which extends east and west. Part of its northern coast is inhabited by a people who are subjects of the Company, and are governed by their Oran Cayos, who have each a dap, or deputy, under them. The interior parts, which consist of very high mountains, are the haunts of the Alforese, or wild mountaineers. The south coast is now deserted, on account of the continual invasions of the Papuas.

The Company have a small fortress in the bay of Cagely, at the north-east end of the island. A book-keeper, who belongs to the establishment at Amboyna, is the chief there.

On the 4th of the same month we saw the island Amblauw, which lies about two leagues south from the east point of Bourou. It is but thinly inhabited. A corporal and four men were formerly stationed here to defend the inhabitants from the incursions of the Papuas\*; but at present there are no Europeans upon the island. It now belongs to the settlement of Larike upon the island of Amboyna, whereas it formerly was reckoned an appurtenance of Bourou.

On the 6th of March we weathered this island, and saw Amboyna at a distance, bearing east-north-east.

The next day, at sunrise, we were in sight of six islands belonging to the government of Amboyna, namely, Amboyna, Ceram, Kelang, Manipa, Bourou, and Amblauw; and an hour afterwards we likewise saw the island Bonoa; we steered for the point of Alang, which is the western extremity of Amboyna.

About three o'clock in the afternoon we got sight of the ensign at the factory of Larike, situated on the west coast of Hitoe, which is the northern peninsula of Amboyna, and on approaching Larike to within half a league, we were saluted by the fort with thirteen guns, which we answered with five.

Hence we sailed, at the distance of a cable's length from the shore, to the point of Alang, where we saw the signal flag of recognizance for my ship flying, about five o'clock; this was red above, and white below; and on the other hand the signal flag which we should have hoisted in return, was to have been, agreeably to the sealed instructions given me at Batavia, one with three horizontal stripes, red, white and red; but such a flag had been totally neglected to be put on board at Batavia: the like occurrence happened to me before, when I sailed to Bengal, in the year 1769. Of what use are signal flags of recognizance, if one is unprepared to hoist the answering signal? A ship's captain can never himself take the necessary care to be prepared for them; for the letter of instructions, containing these secret-signals is put into his hands sealed, with directions not to open it till in a certain latitude; as in this instance I was not to open mine till I had made the island Bourou.

Having got to about an eighth of a league from the point of Alang, the pilot of Amboyna came on board of us, with a written order from the governor of the province to pilot the ship into the bay.

This bay, which is formed by two large peninsulas, Hitoe and Leytimor, connected together, to the eastward, by a very narrow isthmus, called the Pass of Baguwala, and which constitute the island of Amboyna, is, at the entrance, between the points of

\* In March and April the Papuas of New Guinea and the islands Salwatty, Aroo, and Mysol, are apt to assemble in great numbers, and make war on Gilolo, Ceram, Amboyna, Bourou, Amblauw, and as far as Xulla-bessy. About the year 1765 the Papuas plundered the island of Amblauw, and carried off many of the inhabitants. In 1770, upon an incursion of a number of the Papua boats, who sailed up the strait of Patientia, which divides Bachian from Gilolo, the Dutch took the Rajah of Salwatty prisoner, and he was sent into banishment to the Cape of Good Hope. Tr.



Alang on Hitoë and Nofanipe on Leytimor, which lie east and west from each other, scarcely two marine leagues over, and it gradually narrows as it goes farther in. It is only in some parts of it that there is any anchoring-ground, and then it is at no more than one cable's length from the shore, in thirty and more fathoms water; nearly the whole of the remainder is without soundings, not even with a line of one hundred fathoms: a constant current likewise sets into the bay on one side, and out again on the other: this makes it very difficult to enter, especially if you have not a leading wind: if you are becalmed, which is not unfrequently the case under the lee of high land, and get into the stream that runs out to sea, you are soon driven entirely out of the bay by it, and may be in danger of being drifted to leeward of the island, and thereby of losing the voyage entirely. The place where the ships anchor is close to the Leytimor shore, under the guns of Fort Victoria, in twenty-five fathoms; it is three-fourths of a cable's length from the shore, and there is no ground a ship's length farther out.

We pitched to and fro the whole of the following night, in order to work farther up the bay, the wind being north-east, and thus in our teeth.

On the morning of the 8th of March, at daybreak, we found ourselves about half a league from the point of Alang, so that we had advanced but little. The small vessels, which are called corrocorros and orembays\*, ten or twelve of which had come to our assistance in the night, to tow us in, had been of very little service; for the slightest puff of wind moved the ship faster than they could row or paddle.

At noon we were at the Laha, which is a point that runs out from Hitoë, one Dutch mile from Fort Victoria: at two o'clock the deputies from the government at Amboyna, namely, the senior merchant, and second Villeneuve, and the fiscal, Schilling, accompanied by the lady of the latter, and the lady of the captain commandant of the military, Van der Brinke, came on board, in order to congratulate the governor upon his safe arrival thus far, and to conduct him and his lady on shore.

We soon afterwards had a fresh breeze from the north-west, which carried us at three o'clock to the road, where we dropt our anchor in twenty-five fathoms, sandy bottom. We saluted the fort with twenty-one guns, and were answered with the same number; at four o'clock Mr. Van Pleuren went on shore, with his family and the deputies, in a country-boat, upon the mast of which a flag with a pendant under it, was hoisted, and we again saluted with twenty-one guns.

As soon as His Excellency landed, he was received upon the pier by the ex-governor, Van der V——, together with the other members of the council of polity, with their ladies, and passing through a double file of native burghers, or mardykers, who were drawn up before the gate of the fort, he went into it, and out again at the landgate, where the whole garrison stood under arms, and where likewise the Chinese stood ranged in order with their little flags, to the house of Governor Van der V——. As soon as he was seated, the garrison fired three volleys, which was each time answered

\* A corrocorro is a vessel fitted with outriggers, having an high-arched stem and stern, like the points of a half-moon. They are chiefly used by the inhabitants of the Molucca islands, and the Dutch have fleets of them at Amboyna, which they employ as guardacostas. They have them from a very small size, to above ten tons burthen. On the cross-pieces, which support the outriggers, are often put, fore and aft, planks on which the people sit and paddle, besides those who sit in the vessel on each gunnel. In smooth water they can be paddled very fast, as many hands may be employed in different ranks or rows. They are steered with two commodities (broad paddles) and not with a rudder. When they are high out of the water they use oars, but on the outriggers they always use paddles. An orembay we conceive to be a small corrocorro, without outriggers. Tr.

by a gun from the fort, as was also done upon the three volleys of the burghers, after which, a few more guns were fired from the fort, which concluded the ceremony of the day.

CHAP. XV. — *Account of Amboyna. — Isthmus of Baguëwala. — Project for cutting through it. — Abandoned when half completed. — Description of the Bay of Amboyna. — Its natural Strength. — Difficulty of Anchorage. — Road of Fort Victoria. — Currents setting in and out of the Bay. — Peninsulas of Leytimor and Hitoe. — Their Soil and Appearance.*

THE province of Amboyna, which is the first in rank among the possessions of the Company in India, because it was the first which was subdued by their arms, comprizes eleven islands, both great and small, or twelve, if the little island of Molina be taken into the account; these are, Amboyna, Ceram, Bouro, Amblauw, Manipa, Kelang, Bonoa, Ceram-laut, Nouffa-laut, Honimoa, or Sapparoua, and Oma, or Harocha; the three last of which are likewise called the Uliassers.

As, however, Valentyn has been very ample in his account of this province, for which he had the best opportunities, as he resided in it for several years, and, as his work is to be met with in most libraries\*, I shall confine myself to some short remarks, and to some particulars which I thought worthy of observation, and committed to paper while I was there.

According to my own observation, the middle of the island of Amboyna lies in three degrees forty-five minutes south latitude, and one hundred and forty-five degrees east of Teneriffe. It consists of two peninsulas connected together by a narrow isthmus of about three hundred and sixty roods across, which is called the Pass of Baguëwala, from a village, or negree, standing near it, upon the peninsula of Hitoe, over against the negree of Hoetoemoeroe, upon that of Leytimor, which are the names given to the two peninsulas constituting the island of Amboyna.

As the small vessels which go from the fort to the Uliassers, must, on account of this pass, or isthmus, take a great circuit, or else be dragged over it, Mr. Padbrugge, the governor of this province, about the year 1683, formed a design of cutting through the isthmus entirely; nature seemed as it were to have pointed out the propriety of doing this, by the branch of a little river which runs out of Hitoe, and is called Matta-passo, or the eye of the pass, by the natives. The work was begun, from that place to the eastward, right across the isthmus, and it would soon have been crowned with complete success, had not two idle fancies have been the cause of its interruption: the first was, that an idea was started, that as soon as this cut should be effected, the currents would fall through it with such violence into the bay of Amboyna, that the Kaaimanshoek, or Alligators Point, which is a point of land projecting far out from Hitoe, about the middle of the bay, would be washed away, and that ships would in consequence be no more able to come near the fort; the other was, that the Amboynese, who were employed in the work, refused to proceed farther with it, because they made one another believe that in digging blood had been found to issue from the earth, which was an infallible sign of fatal consequences; and however ridiculous the latter might be, it was not by any means possible to get them to go on.

\* The work here alluded to is a description and history of the East-Indies, in Dutch, in five volumes folio, published at Amsterdam in 1724. Tr.

The former objection was scarcely less absurd, as it appears undeniably that the sea, eastward of the pass, is not at all more elevated than the water in the bay of Amboyna, as the intelligent engineer Von Wagner, who has accurately surveyed both shores, has found, and assured me. There was thus not the least probability that the currents could have fallen through this opening, and have had the evil effect which was so groundlessly apprehended. This work of public utility, and of particular advantage to the Company, was therefore stopped, and no one has since thought of undertaking it anew; although Mr. Von Wagner has even told me, that he has frequently demonstrated how easy the cut could be completed, there being now no more than about ninety roods of land to cut through, yet always to no purpose.

The arm of the sea which is now included between these two peninsulas, bears the appellation of the bay of Amboyna. I do not believe that there is any harbour in the world which is naturally so strong as this. From the point of Alang to the Pass of Baguwala it is about five leagues, but from the point of Noussanivel to the same spot, scarcely three and a half leagues, deep: the breadth is unequal; it is narrowest between the point of the Laha and the opposite Galghoek or Gallows Point, where it is about one Dutch mile over, and between the Kaaimans or Alligators Point, and that which projects east of the land of little Hativa, where, at low water, by means of a rocky shoal on the Leytimor, and a sand on the Hitoe side, the passage is so contracted that adventurous persons have more than once crossed it on horseback, although the water between them is full eighty fathoms deep.

The direction of the bay, according to that in which the two peninsulas lie, which bend round and meet each other at the pass, is north-east and south-west.

The point of Alang, or the west point, on Hitoe, and that of Noussanivel, corruptly called Nofanipe by our seamen, or the east point of the bay, lie about two leagues east-half-south, and west-half-north from each other.

From the point of Alang, or pass Lillibooi, to the point of the Laha, there is no anchoring-ground at all, except close to the rocks which border the whole length of the shore, and upon which, especially in the east monsoon, a tremendous high surf continually breaks; but just past the point of the Laha, there is an inlet, or bay (Laha in the Amboynese language signifying a bay), in which a fleet of five-and-twenty ships can anchor in safety, particularly in the west monsoon, in twenty-five and thirty fathoms, good sand ground; the anchorage is about a pistol-shot from the shore, where, in case of necessity, ships may likewise be careened. This was the place where the Dutch fleet, under command of their admiral Stephen Van der Hagen, lay at anchor, when the day afterwards they crossed the bay and took the Portuguese fort.

From this inlet to the Kaaimans Point, there is again no anchorage, except upon the edge of the before-mentioned sand, yet, in case of need, one might anchor near the pass, close to the Matta-passo.

On the opposite shore, along Leytimor, there is, withoutside the bay, about half a league beyond the point of Noussanivel, a reef of about one league in length, on which one may likewise cast anchor, in cases of necessity, when apprehensions are entertained of being driven past the bay by the current, in twenty, eighteen and fifteen fathoms, sand ground. This anchoring place, which is of great importance to the ships bound to Amboyna, is not laid down in the Company's charts of these parts, perhaps, intentionally; but it is inserted in that which is found in Valentyn's work: I also saw it pointed out in the last map which has been made in the bay of Amboyna. When I was at Amboyna, in the month of April 1775, I saw a Chinese vessel lying at anchor upon it. Between the reef, however, and the land which forms

the point of Nouffanivel, the depth is again fathomless, and the shore is bold and rocky.

Past this point, on the inside of Leytimor, there is a bend, the deepest part of which affords good anchorage, in the east monsoon, but it is only quite close to the shore. This is called the Portuguese-bay, but I am ignorant why this name has been given to it.

Thence, till past the Galghoek, or Gallows Point, there is no tolerable anchorage; but you then come to the Vrymans, or free merchant's road, which is just past that point, whence a small rocky reef projects out into the channel; you must be particularly careful not to anchor too near to the point, for worms are so abundant at and near it, that in less than a month's time not only the sheathing, but likewise the planks of the vessel's bottom are completely eat through.

Upon this follows the road of Fort New Victoria, but here the anchoring-ground is equally close in shore; for directly before the fort, and at one and a half cable's length off, there is no bottom with a line of seventy fathoms.

From this place to the point of little Hativa the shore is guarded by an uninterrupted range of sunken rocks, which prevent all approach, and from these to the pass, there is likewise no rising bottom, except close to the shore. In the middle of the bay there are no soundings with a line of eighty, or one hundred fathoms.

The nature of this bay constitutes the strength of the island. It is only in a few parts of it that there is any anchorage, and then always quite close to the shore; and it would be a difficult matter for an enemy's fleet to enter it, and much more so to block it up. The Laha is the only place where ships can assemble, and this may be made so strong that all fear of its being availed of might be dismissed; this has, indeed, now been determined upon, as I shall have occasion to notice farther on.

No rocks, or sands, are to be met with in this bay, save those which have been mentioned, and which lie near the shore.

As there is nothing of this kind to avoid, the whole art, therefore, of sailing into, or out of the bay, or of working into it, consists herein, namely, always to keep well in with the windward shore, and never to fall farther off from it than midchannel. The windward shore is Hitoë, in the good or west monsoon, and Leytimor in the bad or east monsoon.

The currents here are not regular; neither has the moon any constant or equal influence upon the tides; high and low water sometimes occur once, and sometimes twice, in four-and-twenty hours; the difference is from six to nine feet: one or two days before the full moon, the water is found to rise the highest, and fall the lowest.

It is a natural consequence of this deep bay, although at Amboyna it is thought something very singular, that when the current sets into it along Hitoë, it must run out, in an opposite direction, along Leytimor, and *vice versa* in the contrary case.

Both the peninsulas, as well Leytimor as Hitoë, are very mountainous: on the former, the summits of Soya, and on the latter, those of Capaha, tower above the rest: they are almost entirely overgrown with trees and underwood, between which, at intervals, some clove-trees are planted and cultivated by the Amboynese. These mountains, like most others, are in general rocky, and covered with a stratum of earth, the depth of which is very various; in some places it is no more than three feet, or less; in others, it is twenty, or more, feet in depth: the soil is mostly a reddish clay, and in the valleys, where there are no rocks, it is a little more blackish, and mixed with more particles of sand.

CHAP. XVI. — *Climate of Amboyna. — Monsoons. — Rivers. — Hills impregnated with Sulphur. — Soil. — Productions. — Plants. — Herbs. — Trees. — Cloves. — Extirpations of Clove-trees. — Custom of the Amboynese to plant a Clove-tree upon the Birth of a Child. — Nutmegs. — Cultivation of Pepper and Indigo. — Sugar and Coffee might likewise be produced.*

THIS, as well as all the other of the Company's possessions in the Moluccas, is situated in the torrid zone. During the three months which I spent at Amboyna, the medium height of a Fahrenheit's thermometer was between eighty and eighty-two degrees; the greatest heat was ninety-one degrees, and the severest cold seventy-two degrees; a difference which, in these parts, is so considerable, that if such changes were to occur every day, it would, in my opinion, be exceedingly prejudicial to the constitution of the body: this is greatly occasioned by the high mountains of Soya, at the foot of which Fort New Victoria, and the town of Amboyna are situated, whereby the rays of the sun are impeded from shining upon these places, till it has been three quarters of an hour above the horizon; and on the other hand, at noon, when the sun is to the north of the line, as was the case during my abode there, and its rays strike against these mountains, which form, as it were, an amphitheatre, it cannot be, but that the heat must be greatly increased by the reverberation; at least, when I was at the Laha, which lies in a level plain on the opposite side, I did not perceive the excessive heat which is felt at the fort.

The changes which occur, with respect to the weight of the atmosphere, are not so great; during my stay of three months, they could scarcely be said to amount to two lines, or to one-sixth of an inch; neither rain, wind, or fine weather, seemed to have any influence in this respect.

The monsoons are exactly the contrary here, to what they are along the islands of Java, Borneo, Bali, Lombok, Sumbawa, the west coast of Celebes, &c.; for when the south-east monsoon prevails at those places, it is accompanied by fine, dry, and pleasant weather, on which account this season is called the good monsoon: whereas it is then the bad season at Amboyna, Ceram, Banda, the east coast of Celebes, and in the countries and seas lying between them; it then rains almost incessantly, accompanied by violent thunder and lightning, and sudden whirlwinds, to which I have frequently been witness at Amboyna; but all this ceases, and turns to the finest weather, upon having passed the strait which separates Saleyer from Celebes.

Many rivers precipitate themselves into the bay of Amboyna, from the mountains, though they only deserve that appellation during the rainy, or bad monsoon; for in the good season they are mere rivulets, and many of them are nearly dry. I was witness to the remarkable difference occasioned in them by the time of the year; for on my arrival, when the dry season was not over, the four rivers, which run into the sea, near the town and the adjacent villages, namely the Way Tome, the Way Alla, the Way Nio, and the Bato Gadjia, or 'Elephant's river, were, at that time, no more than rivulets, in which there was scarcely two or three feet water; but at my departure, the continual heavy rains had so swelled them, that they carried away in one night the strongest and largest bridges, thirty and more feet in length, that were thrown over them, or at least damaged them very considerably.

Minerals are not met with here, though some of the hills yield abundance of good brimstone, with which their whole surface is incrustated. There is one, in particular, on the peninsula of Hitoe, which is famous on that account, and is thence called Wawani.

Wawani, or Brimstone-hill. The hills likewise to the north of Soeli begin, as it is said, to yield sulphur.

A tough reddish clay is found in some parts, of which bricks are made, which are as good as those made in Holland.

Salutary plants and medicinal herbs are not wanting here, with which, I was told, many disorders and infirmities are cured. Amongst others the boati\* is said to have a singular antifebrile efficacy. Then there is the cajeput-tree †, from the leaves of which the hot and strong oil, called cajeput-oil, is distilled. The saffra-tree ‡, the bark of which yields the costly Coelilawang §, and its roots the saffra-oil. Not to say any thing of the clove and nutmeg-trees, for which this island and the Uliassers are famous.

The wood which is called Amboyna-wood, or properly Lingoa-wood ||, is mostly produced in Ceram; as is the Salmoni-wood \*\*, which is yet more beautiful, but is too scarce to be used for building, the timber for which is mostly brought from Java, though the Jati-wood †† is likewise propagated here with tolerable success; but a sufficient

\* The Boe-ati, which signifies heart-fruit-tree, because its fruit is in the shape of a heart, is called by the Ternatefe Soolamoo, denoting a panacea, or universal medicine, being held as a sovereign remedy in almost all disorders by the Indians; its fruit is so extremely bitter that it is generally called the king of bitterness. Valentyn says, that, infused in brandy, or other spirits, it is good for colic, pleurisy, and other disorders; and that when used for an ague, four or five of the kernels are taken: it is also used with success as an antidote against poison, acting, in the first instance, as a strong emetic: Thunberg says, it is used pounded, in the colic, both by the Malays and the Javanese. Tr.

† Malaleuca leucadendra. Valentyn describes four different sorts of cajeput, or properly cajoe-poeteh-trees, signifying white-wood-trees; it is from the little cajoe-poeteh-tree that the oil in question is distilled: Dr. Thunberg calls it a famous and excellent oil; when taken internally it is a great sudorific, and five or six drops is the largest dose that is given; externally applied, it is excellent in all cases of stiffness or palsy. Tr.

‡ Laurus saffra, but a different species from the saffra-tree of America. Tr.

§ Coelil-lawang is the Amboynese name of the tree, and signifies clove-bark, and the English likewise call the bark by the same appellation of clove bark; it is of a greyish cast, and when upon the tree is smooth, but when dried it becomes rough and shrivelled; it is red within, and that taken from the bottom of the tree has a strong clove smell and taste, but higher up it is not so strong, and is more astringent; it is dried in the sun, and must be kept in an airy place; it is much more esteemed than the Masloy-bark, though its flavour and smell sooner decay. The very excellent and penetrating oil extracted from this bark is almost as fine as oil of cloves, and possesses the same qualities: the Dutch Company reserved to themselves the extraction of coelil-lawang oil, and prohibited individuals from distilling it, upon a penalty of five hundred rix-dollars. Tr.

|| Of the Lingoa-wood Valentyn describes three sorts, the red, the white, and the stone-hard lingoa. The red lingoa is a high and stately tree, with a thick trunk, smooth sappy branches, and long leaves of a bright green colour. Many limbs of the root appear above ground, and these afford the most beautiful pieces of timber. The wood of the tree is whitish immediately under the bark, but grows red towards the centre, and is of so deep a tint, that it has by some been taken for red sandal-wood, though it is much coarser grained; it has a pleasant spicy smell, and is sometimes made up into small articles; but, together with the white lingoa, it is more generally used for rafters, and beams in houses, and for all kinds of carpentering. The white lingoa has a larger and longer leaf, the wood is of a much paler hue, and of a more open and coarser texture. The third sort, or stone lingoa, has a smaller and rounder leaf, and is a much harder and closer grained wood than either of the others; it is seldom met with but in the high mountains of Ceram; it is a very heavy wood, and sinks like a stone in water. The lingoa-wood is susceptible of the highest polish, and its beautiful appearance, when manufactured, is described by Valentyn in the most glowing colours. Tr.

\*\* The Salmoni, or Salemoeli-tree, as Valentyn calls it, affords a most beautiful wood; it resembles walnut-tree-wood in colour, but is veined and variegated in a much handsomer manner; the planks obtained from it are seldom more than one foot and a half in breadth, though sometimes some are got of two, and two and a half feet broad, and four feet long. It is also called bastard-ebony. Tr.

†† The jati, or teak-tree, as it is called in the western parts of India, has its first name from a Javanese word, signifying durable. It is the pride of the eastern woods, and one of the highest and largest trees



ficient quantity has not yet been reared to supercede the necessity of a supply of timber from Java.

There are many other species of wood, besides the above, the half of which I am entirely unacquainted with; they are amply described by Valentyn.\*

Of the products of the country considered as articles of trade, the first rank is occupied by its staple commodity, cloves. The tree† on which they grow is too well and too minutely described by Valentyn, than that I should be required to do it here.

Two large crops of cloves never succeed each other; if the crop be one year very large, that of the next year will be small: the first generally takes place in uncommon dry seasons; and epidemical fevers are then very prevalent.

When the cloves are almost ripe, they must be soon gathered, or they shoot out in a few days into mother cloves. The cloves which are dried over the fire, instead of

of the forest. There are two sorts, which, by the timber they yield, are distinguished by the names of male and female; the former is the darkest in hue, and very veiny; it is easier to be wrought than the latter, which is paler and less veiny. Tr.

\* "A conception may be formed," says Valentyn, "of the great plenty of timber-trees of all kinds at Amboyna, for the construction of ships and houses, and for the finest and most costly articles of furniture, from the circumstance that Mr. Rumphius (author of the *Hortus Amboinensis*) had procured a little cabinet to be made, which was inlaid with nearly four hundred sorts of only the choicest and handsomest woods; and which, together with other curiosities, that gentleman sent as a present, in the year 1682, to the great Duke of Tuscany, Cosmo the Third. If then there are so many sorts of fine and choice woods fit for veneering, how many must not the common sorts be!" He particularly describes a great number, among which are several different species of the ebony-tree; the iron-tree; the casuarina; the wild clove tree; the samama tree, which is a bastard sort of teak; the nani-tree, which yields a timber that is almost imperishable; the Chinese use it for anchors and rudders; it withstands all weathers, and yields but slowly to the powerful agency of fire; it is, however, on account of its hardness, very difficult to be wrought: the cajoe-languit-tree, which has received the proud title of the tree of heaven, or of the firmament, as it seems to lift its lofty and spreading summit to the clouds; &c. At the conclusion of his account of the trees of Amboyna, he assures the reader that the most laborious exertion of a long life would not suffice to become acquainted with all the trees which grow on the lofty and woody mountains, the extensive and impenetrable forests of Amboyna, and that the vast number which he has noticed, seventy-two of which he gives representations of, are but a small portion of the whole. Tr.

† Caryophyllus. The clove is produced on a very handsome tree, somewhat resembling a large pear-tree; its stem is straight, and at the distance of five feet from the ground its branches begin; the bark is thin and smooth, and adheres closely to the wood; the wood is heavy and hard; the leaves stand two and two opposite, they are about a hand-breadth in length, and two inches broad, pointed, ribbed and reddish on the upper, but smooth and of a bright green colour on the under side, they have a very aromatic smell when bruised between the fingers. When a tree is nine years old, and has been well attended to, it begins to yield cloves; they appear in the beginning of the rainy season; they are then little dark-green longish buds; and become perfect cloves in shape in the month of August or September; they then turn yellow, and afterwards red, which is the time for gathering them; if they are suffered to remain three or four weeks longer, they swell and become what are called mother-cloves, which are proper for propagation, or for candying, but not for drying as a spice. The cloves grow on separate stalks, but in bunches of three or more together. Valentyn describes four sorts: that which he calls the male clove, is the sort used for drying; the female produces cloves of a pale colour, which are the best for extracting oil; the king's clove is a very scarce species, bearing larger and double cloves; he mentions one tree of this kind that stood in the island Machian, and a few others that were discovered in 1668, and 1682, in Hative and in Hitoe: the fourth sort are called rice-cloves; they are very small, but likewise very rare: the clove produced upon the wild clove-tree has no kind of spicyness. At the time of gathering the cloves, the ground is carefully swept under the trees, that none may be lost; they are generally pulled off by long hooks. The usual time of the clove crop is in October, and it lasts till December. The oil of cloves is well known in the *Materia Medica*; an hundred weight of cloves used to be employed in former times to procure a quart of oil, but that quantity is now drawn from forty pounds, though it is in consequence not so powerful: the extraction of the oil is strictly prohibited by the Dutch Company to all individuals. Tr.



in the sun, are not good; these may be distinguished by their colour, being more inclining to black, and that they bend between the fingers; while those which are properly dried are on the contrary not flexible, but brittle, and snap asunder upon being filliped with the finger; they are also of a reddish cast.

The crop of cloves depends much upon the temperature of the weather, in the months of June and September. An after-crop is sometimes made, but the time is uncertain, and it does not often happen.

Although this spice is not an indigenous production of Amboyna, but a native of the Molucca islands proper, whence it was brought hither some centuries ago \*, it prospers exceedingly well here, and especially upon the islands of Honimoa, Oma, and Nouffalaut, commonly called the Uliassers, which, together with Amboyna, are the only spots where the Company allow it to be cultivated †, and they constantly cause it to be destroyed in every other place within their reach, especially on little Ceram, or Hoewamoehil ‡; exclusive of the extirpations which take place, from time to time, in the spice-islands themselves, in order to moderate the great abundance of the article, with which their warehouses overflow both at Batavia and in Holland.

Thus the supreme Indian government ordered, by their letter of the 26th of December, 1769, that the number of clove trees should not be allowed to exceed 500,000 §; and it was further ordered, in the year 1773, that 50,000 more should be destroyed, so that at present (1775), after three extirpations, the number of clove trees, as near as could be ascertained, amounts to 513,268; whereof

320,491 fruit-bearing trees,  
104,866 half-grown,  
87,911 young plants,

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513,268

\* A short time before the coming of the Portuguese in Amboyna, the Cerammers of Cambello secretly brought some mother-cloves in hollow bamboos from Machian, whence they were propagated all over Ceram, Amboyna, and the neighbouring islands, and in the space of fifty or sixty years the whole of Hoewamoehil was covered with them. This was told to the Dutch when they first came to Cambello, and some of the trees first planted were shewn to them, behind the hill of Massili, the memory of it is likewise preserved in the traditional songs of the Amboynefe. The brave and enterprising inhabitants of Cambello were rewarded for the openness with which they shewed the Dutch their treasures, by the destruction of all their clove trees, and the deprivation of the fruits of their industry and exertion; the implacable enmity which they in consequence entertained for the Dutch, and their repeated attacks upon the forts their enemies established in their country, have been stigmatized by the Dutch writers, as a base and wicked spirit of disobedience, and an unjust and cruel lust of blood and warfare; “so that,” says Valentyn, “it would have been better, if, instead of extirpating their trees alone, we had, at the same time, exterminated this revengeful and sanguinary nation.” Tr.

† I believe too, that whatever pains foreign nations may take to propagate these spice trees in other places, they will never succeed, except in the neighbourhood of the Moluccas, unless in similar countries, situated in the same latitudes, which, like these, heated by subterraneous fires, afford, by the action of this natural laboratory, sufficient heat to the spice trees, to give their fruit their strong pungent and aromatic flavour. S.

The clove tree has, however, been successfully introduced in the West-India islands, and though the quantities hitherto brought from them, have been very insignificant, yet their constant increase suffices to shew that the culture is in an improving state; in 1797, 350lbs. were imported to London from Martinico, and in the present year 200lbs. from that island, and 2,981lbs. from St. Kitts. Tr.

‡ Hoewamoehil is a peninsula joined to Ceram by an isthmus, called the Pass of Tanoeno; it was not only very fertile in clove trees, but produced likewise large quantities of nutmeg trees; of these last, what was called the Great Nutmeg Tree Forest, was destroyed in 1667, and in another place 3,300 nutmeg-trees. Tr.

§ One hundred and twenty-five clove trees are allowed to a plantation, or douffon, as it is called by the Amboynefe, and of these there are 4000, which makes the number of 500,000 trees. Tr.

Besides 22,310 tatanamangs, which are trees that are not comprehended in the clove plantations, but stand interspersed here and there, near the houses. Every Amboynese plants such a clove-tree when a child is born to him, in order by a rough calculation to know their age. Although they do not oppose the extirpation of the clove-trees in the plantations, when the Company think it fit, yet to touch their tatanamangs would speedily be the cause of a general insurrection among them; this was manifest on the occasion of one of the last extirpations, when the extirpators ignorantly, at least as they pretended, cut down some tatanamangs. The whole country was immediately up; and had not the then governor, Van der V——, speedily provided against it, they would have destroyed all the other clove-trees, set fire to their habitations, and flying to the mountains, they would thus have withdrawn themselves from their obedience to the Company.

I have been assured that a clove-tree will continue to bear fruit for the space of eighty years\*.

Besides the clove, nutmeg-trees likewise grow here with tolerable luxuriance; but they are all destroyed by the orders of the government, whenever they are found†.

In proportion as the clove trees were more and more eradicated, the government at Batavia began to think on the means of giving the Amboynese an equivalent for the diminution of that production, as the crop of cloves brought but little money into circulation, in proportion to the number of inhabitants, of which I shall say more here-

\* Valentyn mentions a clove-tree upon Hoewamochil, that was known to be one hundred and thirty years old, and to have yielded in one season two bhars, or 1,100lb. of cloves. Tr.

† As we had no opportunity, in the short account given of the islands of Banda in the first volume, to describe the nutmeg-tree, it may be well to introduce an account of it here. The *myristica moschata*, or true nutmeg, is a handsome and spreading tree; the bark is smooth, and of a brownish grey colour; the leaves are elliptical, pointed, obliquely nerved, on the upper side of a bright green, on the under whitish, and stand alternately upon footstalks; they afford a most grateful aromatic scent when bruised. If a branch of the tree be broken off, a sap runs out of it, which is of great prejudice to the tree; and it never thrives well afterwards. It does not bear fruit till its eighth or ninth year. When it begins to produce fruit, little yellowish buds make their appearance, out of which small white flowers are blown, hanging two or three together, upon slender peduncles; in the centre of the flower is an oblong reddish knob, from which the fruit is produced, though no more than one blossom out of three commonly ripens to a nutmeg. The fruit is eight or nine months arriving at maturity; but blossoms and ripe fruit are found at the same time upon the same tree, and the nutmegs are generally gathered three times in a year. The fruit appears like a small peach, both in shape and in colour, only it is pointed towards the stalk; when it is ripe, the outer coat, which is almost half an inch thick, opens and shews the nutmeg, in its black and shining shell, encircled by a network of scarlet mace; the outer coat is generally whitish, a little hard, and is very good preserved in sugar, or stewed; you then come to the mace, which is of a fine bright red colour, and under it a black shell, about as thick as that of a filbert but very hard; it is opened by being first dried successively in five different petaks, or drying places, made of split bamboos, upon which the nutmegs are laid, and placed over a slow fire; in each of these petaks they remain a week, till the nutmegs are heard to shake within the shell, which is then easily broken; the nutmegs are then sorted and delivered to the Company; each sort is then separately put in baskets, and soaked three times in tubs with sea-water, much impregnated with lime; they are then put into distinct closets, where they are left for six weeks, to sweat; this is done that the lime, by closing the pores of the nuts, may prevent their strength from evaporating, and likewise because such a prepared nutmeg is not fit for propagation. Some trees afford longer, and some rounder nutmegs, but which are of the same quality: the long ones are called male nutmegs; but there are likewise wild male nutmegs, which have little flavour, and are not valued. The Bandanese enumerate several sorts of nutmegs; but they appear only varieties in the fruit of the same tree. The *myristica fatua*, or wild nutmeg, grows in all the Eastern islands; it seems to have been this sort that Forrest obtained at Dory harbour in New Guinea, and planted on the island of Bunwoot: it is produced likewise in the West Indies, at the island of Tobago. An essential oil is extracted both from nutmegs and from mace; it is reckoned that three cattis of Banda, making about seventeen pounds and a quarter Amsterdam weight, yield about a quart of oil. Tr.

after. For that purpose, His Excellency Governor Mossel proposed (in his Secret Considerations on the State of India, offered to the gentlemen in authority at home, under the head of Amboyna,) to encourage the cultivation of pepper and indigo there, as much as possible, in order to furnish a better means of subsistence to the natives; but the little inclination which the rulers of Amboyna have shewn to comply with this proposal, and the little attention they have bestowed upon the subject, or, as they allege in their own exculpation, the indolence of the Amboynese, have almost wholly frustrated the attempts which have been made in this line.

The indigo that is produced upon Leytimor is thought to be much better than that of Buro: a pound of the former stands the Company in six gilders\*; but it is very little inferior in point of brilliancy of tint to Prussian blue.

The government then adopted the mode of taking it by contract, promising to pay forty-eight stivers for the first, thirty-six for the second, and twenty-four for the third or worst sort†; but neither did this succeed, while its failure is equally attributed to the laziness of the natives.

The following quantities were delivered to the Company in 1748 and 1749, according to the report of Governor Roozeboom:

	From Hila.	From Boura.
1748	- 185lb.	281lb.
1749	- 200lb.	225½lb.
	<hr/> 385lb.	<hr/> 506½lb.
		385
		<hr/> In all 891½lb.

The cultivation of pepper in Boura succeeded no better, though the pepper-vine it is said grows very well there, and produces a large corn; but which is not of so hard a substance, nor so strong a flavour, as that of Bantam, or the Malabar coast.

I am much surpris'd that the government has not hitherto taken any pains to prosecute the cultivation of the sugar-cane in the islands of Amboyna, for it grows as luxuriantly, and as full of sap here, as in Java or any where else; which I know by having frequently seen and examined the canes which have been planted here and there by the slaves for their own use. This would not only alleviate the poverty of the Amboynese, as their clove-trees are destroyed from year to year, but it would, on the other hand, be no less profitable to the Company, as the article would be conveyed hence, without any additional expence, by the clove-ships, on board of which it could be stowed as a lower tier, and serve for ballast. Perhaps, however, this has never been put in practice, in order that the competition of the sugars from Amboyna might not be of prejudice to the sugar-works of Jaccatra, in which perhaps the gentlemen in the direction of affairs are interested.

Coffee likewise grows here in sufficient luxuriance to encourage the Amboynese in the cultivation of it; and the quality of it is by no means inferior to that of Java.

\* About 11s. sterling. T<sub>R</sub>.

† About 4s. 4d. for the first, 3s. 3d. for the second, and 2s. 2d. for the third sort. T<sub>R</sub>.

CHAP. XVII. — *Description of the Sago-tree, and of the Manner in which the Sago is prepared. — The Ela. — Sago-bread. — Gabbe-gabba. — Atap. — Sago-woods of the Company. — Fruits. — The Sagwire-tree, and the Liquor drawn from it. — Animals. — Deer. — Wild Hogs. — Babi-rouffa, or Hog-deer. — Fishes. — Wonderful Stories of the Amboynefc. — A Fish called Jacob Evertsen. — Reptiles. — Snakes. — Domestic Animals.*

THOUGH the clove-tree yields the richest production of this island, the sago-tree is of much greater utility to the Amboynefc.

This production, which a wise Providence has bestowed as an universal article of food upon the inhabitants of Amboyna, Ceram, and the surrounding islands east of Celebes, (for on Celebes it grows not \*, though it is again found in Borneo, where on the contrary, rice, as a primary article of food, is wanting) propagates itself by offsets, or shoots, which for a long time appear only like bushes †, and which all proceed from the roots, or from the bottom of the trunk of a full grown tree.

I shall not set down all that appeared to me worthy of observation on the subject of this tree, as Valentyn, in his description of the trees and plants of Amboyna, is ample in his account of it; but I shall only make mention of what he has not noticed.

The stem, when it begins to form itself out of the bush, shoots up as straight as an arrow, to the height of between forty and sixty feet, without any lateral branches, just like the firi and cocoa-nut trees, to which genus it likewise belongs, forming a handsome crown at the top, which affords an agreeable shade.

A grove of these trees, with their erected stems, which, when arrived at maturity, consist of nothing but a spongy and mealy substance, surrounded by a hard bark, of about half an inch thick, and their beautiful leafy crowns, have a very charming appearance, and form a pleasant and cool retreat.

This white, spongy, and mealy substance is the sago, which serves the natives in lieu of bread ‡.

As the manner in which I have seen the sago pockeled, or made into meal, differs in some respects from that which Valentyn relates, I shall here shortly particularize it.

A tree is first made choice of, the pith of which it is certain has attained its full maturity, and this is perceived by its beginning to be of a yellowish white cast just under the foliage§. The stem is then cut through as close to the ground as possible, in order to lose the less of the farinaceous contents.

When the tree is thus felled, it is cut through in the middle of its length into two or more pieces, and the hard bark of each piece is split asunder by the insertion of wedges; the sago then appears uncovered, just like the spongy substance in our elder-trees. They then make a certain instrument, resembling an adze, out of one of the

\* Other travellers inform us that the sago likewise grows on Celebes, especially, and in much abundance, at the bottom of Bugguefs Bay. Tr.

† Yet these bushes are about fifteen or sixteen feet in height. Tr.

‡ The sago tree does not produce any fruit till it has lost its strength and is about to die, when the branches likewise appear covered with meal; it then produces at the top a bunch of small fruit, like pigeon's eggs, which are first green, and afterwards yellow; the kernel is very astringent. It delights in wet and morassy situations, and will not grow except in low grounds. It does not live above thirty years. Tr.

§ They likewise sometimes try it by chopping a hole in the tree, out of which they take some of the pith to examine whether it be ripe enough: if not, they close the hole again; but else they immediately fell the tree, as if suffered to remain too long, and till it produces fruit, they know that the pith will turn entirely into green filaments, and yield no sago. Tr.

branches of the tree they have felled, with which they loofen the fago all round from the bark, and reduce it to the appearance of faw-duft.

The whole tree being thus poekeled out the raw fago is put by portions into a trough, like a canoe, and water is poured upon it, and well mixed with the fago, by which means the meal is feparated from the filaments.

These filaments, which might be denominated the bran of the fago, are called *ela*, and are made ufe of to feed hogs, poultry, &c.

The water, thus impregnated with the fago-meal, having flood ftill for fome time, the meal fubfides by its own weight to the bottom, the water is then poured off, and it is a fecond time purified in the fame manner; after this the wet meal is laid upon flat wicker-baskets to dry, and it is then kneaded together, and into little cakes of three inches long, two inches broad, and half an inch thick; finally, it is put into moulds of the fame fize and fhape, and baked over the fire till it is done enough, and becomes dry and hard.

The tafte of the fago-bread does not much vary from that of the caffava, or manioc, of the Weft Indies, but it appeared to me to be more nutritive; it is not unpleafant to eat when it has been firft a little soaked, and afterwards fried in butter, yet it is very difficult of digeffion.

The fineft part of the meal is mixed with water, and the pafte is rubbed into little round grains, like finall fhot, and dried. This preparation is not difagreeable in foups, in lieu of Italian macaroni: the fago that is produced in Borneo is efteemed the beft for this purpofe.

A preparation is likewife made of this fineft part of the meal which is called *popeda*, and has much refemblance to the porridge of buck-wheat meal which is made in Holland, but it is much more gelatinous. This is eat off of little fticks, which being dipped into the *popeda*, take with them a part of it which adheres to them; they are then dipped in fifh-broth, and, together with a little fifh, confitute the beft difh of the Amboynefe, and even of thofe who are defcendants of Europeans.

A tona, or twenty-five pounds weight of fago-meal, is fold here in general for feven or eight ftivers; and an ordinary tree, which can commonly be poekeled from its twelfth to its twentieth year, yields five or fix hundred pounds of it.

Befides the farinaceous part for food, the fago-tree yields other things of utility to the Indians.

The ftem or bark, after the meal has been poekeled out, is made ufe of by the natives to form little bridges over rivulets, or little creeks.

What are called the branches, which are channelled on the upper fide, and convex on the under, ferve alfo fometimes for the fame purpofe; but the chief ufe which the Amboynefe make of them is for the walls and roofs of their houfes, and for packing-cafes, &c. This article is called *gabbe-gabba*.

The leaves, laced together, form what is called *atap*, and ferve inftead of tiles for covering of houfes, and to preferve things from the rain; but roofs of *atap* muft be renewed every fix or feven years |.

Although

\* The mould, or oven, for baking fago-bread is made of earthenware; it is generally nine inches fquare, and about four deep, divided into two equal parts by a partition parallel to its fides. Each of thofe parts is fubdivided into eight or nine, about an inch broad, fo that the whole contains two rows of cells, about eight or nine in a row. The oven is turned firft on one fide and afterwards on the other upon the fire, and the cakes are fufficiently baked in about ten or twelve minutes. Tr.

† The fago-tree has, like all the trees of the palm kind, a cabbage, which is eaten by the natives, though it is not fo good or wholefome as that of the *aneebong*, or proper cabbage-palm. When a fago-tree

Although the fago-tree grows on almost all the islands of this province, it is upon that of Hoewamoehil, or Little Ceram, that the largest woods of it are found, of which the Company reserve the property to themselves, and annually dispose of their produce to their own emolument. The woods of Lochoe and Hanitello yielded to the Company, in one year, according to the report of Governor Roozeboom, the quantity of one thousand and sixty-seven pounds. It is distinguished into three sorts, which the Company have respectively sold at the following prices :

The maha poetey, or best sort, at 1 rix-dollar per lb.

The majou baroe, or second sort, at  $\frac{1}{2}$  rix-dollar per lb.

The feri boa, or third sort, at  $\frac{1}{4}$  rix-dollar per lb. \*

In how far now these fago-woods of Little Ceram are the source of revenue to the governor of Amboyna, I will not here examine into.

Fruits and vegetables for food or refreshment are but scarce. The shaddock †, which is by no means as good as at Batavia, a few sweet oranges, mangos ‡, mangoosteens §, the bilimbing ||, and water-melons, are almost the only fruits, and they are not very abundant. The few vegetables which grow here, require infinitely more attention in rearing them than at Batavia.

The sagwire is a liquor drawn from a tree, which, according to the little knowledge I have of botany, belongs to the same genus with the cocoa nut, fago, firi, and date-trees. It is of the same nature as the toddy, or palm-wine.

When it first comes from the tree it is clear, and looks much like pure water. Its taste is sweet, but refreshing. It becomes acidulated by degrees, and at last turns quite sour, which however, can be prevented by preparing it by means of a certain bitter wood ¶, which being put into it preserves it good for a long time : although it then

tree has been felled, the ela, or refuse, is frequently left in the woods, and the wild hogs fatten upon it ; a kind of mushrooms, which are much esteemed by the natives, grow upon the heaps of ela. The fago-tree is even of benefit after it has been deprived of its pith, and left to rot where it was felled ; for when rotten, a sort of very fat white worms, called fago-worms, with brown heads, are found in it, which the Indians roast, and think a great delicacy. A computation has been made by Forrest of how many persons may live on an acre planted with fago-trees. A fago-tree he allows to take up 100 square feet ; now the contents of an acre are 43,500 square feet, which allows 435 trees to grow within that space ; but supposing only 300, and that, one with another, they give 300 weight of flour, then three trees, or 900 weight, would maintain one man for a year, and an acre to be cut down would maintain 100 men for the same time ; now, as fago-trees are seven years a-growing, 100 divided by seven will allow fourteen men to be maintained for a year on the produce of one-seventh part of an acre, immediately, or on the produce of a whole acre, progressively cut, one-seventh part at a time, allowing fresh trees to sprout up. By Dr. Forster's computation, ten or twelve persons live eight months upon the produce of an acre planted with bread-fruit-trees at Otaheite. TR.

\* The inconsistency of this paragraph with what has gone before, must be ascribed to some very material errors of the press, in numerical characters, in the original ; the quantity of 1067lb. of fago is barely the produce of two trees, according to what has preceded, and therefore is palpably absurd as applied to the produce of the largest woods ; supposing it even ought to have been printed 106,700, it would fall considerably short of what that expression would lead us to expect, as it would then be no more than the produce of about 200 trees. How, too, shall we reconcile the prices of 1  $\frac{1}{4}$ , and  $\frac{1}{2}$  rix-dollar per pound, with that of seven or eight stivers for twenty five pounds ? No clue has been found in any of the writers consulted to solve these difficulties, and there was therefore no alternative to leaving the text as it stands in the original.

† *Citrus decumanus*.

‡ *Mangifera indica*.

§ *Garcinia mangostana*.

|| *Averrhoa belimbi*.

¶ For this purpose the roots of a tree called the fosoot-tree are used, which occasion a fermentation in the sagwire, and in about eight hours make it fit for keeping. TR.

loses its pleasant taste, and turns thickest, looking like orgeade, or almond-milk, it is esteemed more wholesome, and has an inebriating quality; it is afterwards kept in bottles well corked.

The tree which yields this liquor has always a faded appearance, with many yellow dead leaves, which look much like those of the sago-tree. One of these leaves, or rather branches, is cut off, and the sagwire trickles out of it by drops, which are caught in a bamboo, hung under it for that purpose, and when this is full, the contents are drawn off by a tap at the bottom; this operation is called tyffering.

The woods are filled with deer, and with wild hogs, the flesh of which animals is almost the only meat that is eaten here. It is used fresh, salted, and dried: in the last manner it is called dingding; it is broiled a little over the fire, and eaten with rice: it is a chief article of food of the Europeans, and the Amboynese eat it likewise when they can afford to purchase it.

Among the wild animals, which inhabit the woods of the island Bouru, there is one which bears the name of babi-roussa, or the hog-deer; it has been fully described by Valentyn, who has given us a representation of it; but it appeared to me, when I compared the figure with one of the animals alive, that its legs were longer than they are there represented\*.

The bay used formerly to abound in fish; but they are not so plentiful now, on account of the violent earthquake of the year 1754. Most of the fish that are found here are peculiar to these seas.

Many very strange fishes must have been met with here, in the time of Valentyn†; and in this region of wonders, it is not sufficient that the really singular productions of nature are beheld and admired, or feared, but superstition has multiplied wonders upon wonders. *Inter alia*, there is, say the Amboynese, and likewise the Macassers, a monster that has its abode in these seas, which they describe as having a thousand legs, all of them so large, that if it lay but one of the thousand upon any vessel it must immediately founder; and yet this monster is believed to be afraid of a common cock; whence these poor superstitious mortals will never put to sea without having chanticleer for a guardian angel on board.

There is likewise, it is said, a large fish near the pier-head at Amboyna, to which the name of Jacob Evertsen has been given, and they pretend that it takes away one man every year. I am not qualified to say whether any fish of the shark kind does, or does not particularly resort to that spot, although many reputable people at Amboyna believe the whole story; but it is certain, however, that on the evening of my arrival here,

\* The babi roussa, which is a Malay appellation signifying hog-deer, partakes, as its name denotes, of the nature both of the hog and of the deer. The chief singularity of the animal consists in two of its upper teeth being curved round, and, penetrating through the bone of the forehead, appear just above the snout like two semicircular horns; they are sometimes so far bent round, that they grow into the bone of the head again; it has likewise two tusks placed in the under jaw, like other wild boars: the female is without any of these projecting teeth: it has a soft thin skin, with short hair, and has no bristles; the snout is more pointed than that of the other wild hogs, and the tail is longer, with a bunch of hair at the end; the ears are pretty short, and the eyes small; its feet have each two long and two short toes, but the fore legs are much shorter than the hinder ones; these animals are easily hunted down, but they frequently hurt the dogs with their lower tusks; the upper tusks are too far recurved to admit of their defending themselves with them. Their flesh more resembles venison than pork; there is little fat upon it, it being moistly solid meat. They do not live, like the other wild hogs, upon sago and canari, a sort of almonds, but chiefly upon grass and the leaves of trees. They never associate with the wild hogs, and when hunted they generally take to the water, where they are very expert in swimming and diving, and sometimes swim over from one island to the next. TR.

† Valentyn describes and gives representations of five hundred and twenty-eight different sorts of fish, though it is said to be a liar to these seas. TR.



about nine o'clock, a sailor of one of the sloops that lay just behind my ship, on his swimming ashore to fetch his pocket handkerchief which he had left, was so dreadfully bitten by some fish or other in the head that he died the same night; and he would probably have been dragged to the bottom and devoured, had not immediate assistance been given to him, upon his loud cries for help, as well from my ship as from the other vessels.

From lions, tigers, wolves, and other beasts of prey Amboyna is free. The most noxious animals are snakes, of which there are several sorts in the woods and fields, which are amply described by Valentyn.

I one morning, walking in the garden behind my house, found the oelar bifa nepis, or thin poison snake\*, so close to me, that I should probably have trodden on it, had it not first discovered and hissed at me, whereby I had just time to retire from the dangerous neighbourhood; I caught it a little while afterwards, and preserved it in spirits.

The snakes with legs appear to me to belong rather to the lizard tribe, than that of snakes. Among the singularities here we may reckon the flying lizard.

I shall not speak of the other animals and insects, crocodiles, alligators, gek-koss, lizards, scorpions, centipedes, nor of the very curious insect called the walking leaf, as they are all sufficiently described by Valentyn†.

Of the domestic animals, among which are enumerated buffaloes, cows, horses, sheep, goats, and hogs, the last-mentioned only are natives of the country; the others have been brought hither, as well by the Portuguese as by the Dutch, from Java, Celebes, and the south-western isles.

The cows here give much less milk, and worse butter than in Java; the price of the butter remains the same as it was eighty years ago, in the time of Valentyn, viz. one rix-dollar per pound.

CHAP. XVIII. — *Inhabitants of Amboyna. — The Alfoerefe; — Account of them by Rumphius. — The Amboynese; — Their Stature; — Appearance; — Temper. — The Women; — Their Lasciviousness. — The Religion of the Amboynese; — Their Idolatry; — Vices. — Amboynese Christians; — Their Superstition; — Their Government. — The Chinese. — Account of a Chinese Marriage at Amboyna. — Descendants of Portuguese. — Foundation and Extension of the Power of the Dutch here.*

THE inhabitants of Amboyna, and of the adjacent islands belonging to this government, may properly be divided into four classes, viz. the Alfoerefe, the Amboynese, the Europeans, and the Chinese.

The Alfoers or Alfoerefe are, in all probability, the first and most ancient inhabitants of these countries; at the present day they still remain separate from the other inhabitants, and dwell in the mountains of Bouro and Ceram, where they live accord-

\* Nearly twenty different sorts of snakes are described by Valentyn. Among them the oelar bifa biroe, or blue poison snake, is the most venomous; it is no more than a foot and a half in length, and about two inches thick; it is remarkably quick, and its bite is mortal. The oelar bifa nepis, or thin poison snake, is scarcely a quarter of an inch thick, and about a foot and a half, or two feet in length; its bite is equally incurable. TR.

† The inestimable work of Valentyn, to which the reader is so frequently referred, is scarce even in Holland; it consists of five large folio volumes, containing upwards of one thousand copper-plates. The translator is in possession of a copy, which he procured at much pains and expence; and would his limits allow of it, he would be more copious in his extracts from it, as it is a treasure locked up in a chest, of which few have the key, no translation having ever been made of it. TR.

ing to their ancient customs, and avoid all intercourse with the inhabitants of the sea-coasts, except when they are in want of such articles as are not to be met with in the interior parts of the islands, which chiefly consists in iron and salt, against which commodities they give in barter the productions of their mountains.

The few which I saw of this nation appeared to me not so dark in colour, and both handsomer and more sinewy than the Amboynefe.

I met with the following account of them, in the description of Amboyne composed by Rumphius, which having been prohibited by the government at Batavia, has never been printed, but of which a manuscript copy is preserved in the secretary's office at Amboyne.

“ Most of the Alforese inhabit the wild mountains and interior parts of Ceram. They are large, strong, and savage people, in general taller than the inhabitants of the sea-shores; they go mostly naked, both men and women, and only wear a thick bandage round their waist, which is called *chiaaca*, and is made of the milky bark of a tree, called by them *sacka* (being the *sicamorus alba*). They tie their hair upon the head over a cocoa-nut shell, and stick a comb in it; round the neck they wear a string of beads.

“ Their arms are a sword made of bamboo, together with a bow and arrows.

“ They are sharp-sighted, and so nimble in running, that they can run down and kill a wild hog at its utmost speed.

“ An ancient, but most detestable and criminal custom prevails among them, agreeable to which, no one is allowed to take a wife, before he can shew a head of an enemy which he has cut off: in order to obtain this qualification for matrimony, six, eight, or ten of them go together to a strange part, where they stay till they have an opportunity of surprizing some one, which they do with great dexterity, springing upon the unwary passenger like tigers: they generally cover themselves with branches of trees and bushes, so that they are rather taken for brakes and thickets than for men; in this posture they lie in wait for their prey, and take the first opportunity that presents itself of darting their *toran* or *fagoe* (a sort of missile lance) into the back of a passenger, or spring upon him at once, and cut off his head with which they instantly decamp, and fly with speed from the scene of their wanton barbarity.

“ If they want to build a new house, or a new *baleeuw*, which is a kind of council-hall, they must equally first go and fetch some human heads. They are not to be broken of this horrid custom; and it is the only objection they make to embracing the Christian religion, that they must then abandon it; for no one attains a higher degree of fame and respect, than he who has brought in the most heads; and in proof of his prowess, he wears as many little white shells round his neck and arms, as he has murdered men.

“ The heads thus brought in are shewn upon a stone in the village, consecrated to that purpose, and are afterwards heaped together in dark groves, in the recesses of the mountains, where they practise their diabolical rites, for they do not perform the demonolatry they are addicted to in any temples, but here and there in solitary places, and in dreary woods, where the devil answers their interrogatories, and often carries away some of them, especially children, for three or four months, after which time he brings them back again, after having presented them with painted canes, to which several little strings of Chinese copper money are attached \*.

“ They

\* These circumstances assume a more probable appearance in the more ample relation which Valentyn gives of the religion of the Alforese. “ They have (he says) in Ceram, and elsewhere, temples which

“ They subsist upon the wild animals which they catch in the woods ; nor do they even disdain snakes.

“ Their women are of a tolerably fair complexion, well proportioned, and altogether by no means disagreeable.

“ Among these Alforese there is another kind of savage people, who do not dwell in any houses or huts, but upon high warinje and other trees, which spread their branches wide round : they lead and intertwine the branches so closely together, that they form an easy resting-place ; and each tree is the habitation of a whole family : they adopt this mode, because they dare not trust even those of their own nation, as they surprize each other during the night, and kill whoever they take hold of.”

Thus far the relation of Mr. Rumphius, who being a man of some experience and much reputation, deserves credit in some instances.

I could not meet with any other intelligence respecting these people at Amboyna, as they are but seldom visited, and still more rarely by people either able or willing to observe and record what is curious among them.

The Amboynese are also very ancient inhabitants of these islands ; but the difference of their make, and the rather darker shade of their complexion, seem to point out that they are not descended from the same progenitors as the Alforese.

They are of a middling size, rather thin than otherwise ; their colour is nearer approaching to black than to brown ; both men and women have regular features, and among the latter there are very many who are handsome : it seemed very probable to me, that the country or the climate contributed much to this, though how or why I cannot tell, for the children of Europeans born here are almost all pretty, and much more so than in Java or at Batavia.

Neither the thick lips nor the depressed noses, which, according to our ideas of beauty, deform the “ human face divine” in other hot countries, are seen here ; but on the contrary, and especially among the females, perfectly symmetrical countenances are the general characteristic of the inhabitants.

They are indolent and effeminate, and both want and violence prove but feeble motives to incite them to labour. Yet this is no more than is almost universally the case with all nations who bow their necks under a foreign yoke, especially in the Asiatic regions, and other warm countries : and I think it probable, though the heat of the climate is alone sufficient to produce inactivity, and a repugnance to every thing that fatigues the body, that they had been slaves inured to servitude under the dominion of strangers, long before the Europeans came hither. The fervency of the climate, united to the easy mode of procuring subsistence from the sago-trees, and from the copious supply of fish, which was formerly within their reach, in the bay of Amboyna, have been the causes that they have never been obliged to have recourse to the fatiguing labours of agriculture, to administer to the wants of nature. Hence they have easily fallen a prey to the nations who aimed at subduing them, as was manifest

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they call marel, and likewise toctoe-wo, made of gabbe-gabba, which stand in the deepest part of the woods, and under the darkest trees. In them parents deliver their children, under twelve years of age, to the priests, to be instructed in the service of their demon or god, and the priests receive the children, without the parents being able to see any thing in the temple, on account of the almost utter darkness that prevails in it. Immediately after they hear the most dismal cries, and see bloody pikes sticking through the roof of the temple ; and though this would seem to denote that their children are murdered, they receive them back in three months. Each of those children then receives a painted stick of thin white cane, upon which some figures are burnt, and to which a few strings of Chinese copper coins are hung ; they are then rubbed with yellow paint and aromatic oils, and sent about the village to beg for gongs, clothes, and other things, for the chief priest.” The remainder of the account he gives of the Alforese, though far more copious, is perfectly similar to and consistent with that of Mr. Rumphius. Tr.

in the war with the Ternateſe, the Portugueſe and the Dutch. Neither were they at all the cauſe that the princes of Celebes have not extended their dominion ſo far to the eaſtward, for the three abovementioned nations have always prevented it; although at that time the kings of Nouſſanivel took the high-ſounding and proud title of “Kings of ten thouſand ſwords.”

The Company muſt not, therefore, ever think that the Amboyneſe would be of any help to them, in caſe a foreign power were to endeavour to wreathe theſe poſſeſſions from them; for, were there no other reaſons to induce them to look upon any change as being for the better, their indifferent, indolent, and timorous diſpoſition would be ſufficient to prevent them from joining either ſide. It is true, that thoſe of Hitoe formerly ſhewed a little more courage in the civil commotions which took place in the laſt century, when they fought for independence, as they could no longer bear the oppreſſion of their inhuman maſters; but in the caſe we have ſuppoſed, it would be the ſame to them beneath which European yoke they had to bend; as, let the event be as it might, they would always have to wear the chains of the conquerors; beſides that, as attached to the Mahomedan religion, they are the ſworn enemies of all Chriſtians.

The women, though they are not ſo indolent as the men, are, on the other hand, exceſſively laſcivious; they poſſeſs no chaſtity either in a married, or an unmarried ſtate, and there is nothing that can reſtrain them from ſatiſfying their paſſionate deſires. It is very uſual among them that a girl gives proofs of her fruitfulneſs before marriage, which is never the leaſt bar to getting a huſband; and, on the contrary, frequently is a reaſon for being preferred to others, of whom it is leſs certain that they are capable of becoming mothers.

The Amboyneſe were in former times, as the Alforeſe are at preſent, idolaters; but the Javanefe, who began to trade hither in the latter end of the ſixteenth, and in the beginning of the ſixteenth century, endeavoured to diſſeminate the doctrines of Mahomet here, and they ſucceeded ſo well, that in the year 1515, that religion was generally received.

The Portugueſe arriving here in the mean time, endeavoured likewiſe to make the Roman catholic religion agreeable to the inhabitants, and to propagate it amongſt them; which, in particular, took place, according to Rumphius, in the year 1532, on the peninſula of Leytimor, but thoſe of Hitoe have, to the preſent day, remained firmly attached to the Mahomedan faith, whence, in contradinction to the Leytimoreſe, they are called Moors.

When our people came to Amboyna, and the Portugueſe were expelled from the iſland, the proteſtant religion was gradually introduced; yet the unpleaſing reſult of theſe frequent changes of religion has been, as might naturally be expected, that, from blind idolaters, they have firſt become bad Roman catholics and afterwards worſe proteſtants.

The practice of idolatry cannot yet be wholly eradicated; this, added to the prevalence of the ſuperſtitious which diſgrace chriſtianity among the followers of the Roman catholic perſuaſion, and the almoſt univerſal negligence and want of zeal of our eccleſiaſtics in theſe regions, almoſt entirely takes away the hope that the ſalutary doctrines of the goſpel will ever be deeply rooted here, and that the Amboyneſe will ever be cured of their deplorable blindneſs.

I cannot either ſay much good reſpecting their moral conduct; I have before mentioned that the women are univerſally unchaſte, and the men are, in this reſpect, no better. Theft is likewiſe one of the moſt prevalent vices among the Amboyneſe, and they are not a little dexterous in contriving the means of pilfering; I had twice expe-

rience of their adroitness in this respect, during my residence among them. Malice and envy are predominant passions in their breasts, and are carried to great excess; they envy each other the least degree of benefit or prosperity; yet this is seldom productive of public assassination or private murder among them, for being a pusillanimous and superstitious race of men, death is to them, more than to any other nation, a king of terrors.

When these Amboynese Christians go in their vessels past a certain hill on the South coast of Ceram, they make an offering to the Evil Spirit, which they believe resides there, in order that he may not do any harm to them or to their vessels. This offering is made in the following manner: they lay a few flowers, and a small piece of money into empty cocoanut-shells, which they set a-floating in the water: if it be in the evening, they put oil into them, with little wicks, which they set a-light, and let burn out upon the water: they are persuaded that by this means they have appeased the Evil Spirit, and that he will not raise any storm against them.

Valentyn has been sufficiently ample in describing their dress, houses, diseases, customs, &c. \* to preclude the necessity of my saying more about them; I wish only to observe that that writer has placed almost every thing in the most advantageous light.

The inhabitants of Amboyna seem, from time immemorial, never to have been united under one head; but, as the most ancient accounts and traditions relate, each negree, or village, was governed by its own chief. It is true, there have been, and there are at present, unions of four or five-negrees under one chief; but they are the least in number: among these, the principal is Nouffanivel, whose rajah, or king, has three other negrees under his dominion.

These chiefs are distinguished into three classes, or ranks; thus, there are rajahs, or kings; patti, who may be said to be dukes or earls; and oran cayos, which signifies as much as rich men. Their chiefs, however, do not possess an absolute authority: every negree has given as council to their chief, consisting of the oldest and most respectable men of the village, who are called oran touas, that is, elders; and the rajah, patti, or oran cayo, of the negree is bound to consult with them at the caleeuw, or council-hall, on all the concerns of the community.

Every negree has likewise its marin hos, who do not assist at the councils, but are exalted above the commonalty, and serve for exhorters and encouragers of the people in every public work.

Besides several little services which the common people are obliged to perform for these chiefs †, the last have likewise an income proceeding from the crops of cloves, which the Company have bestowed upon them.

The Company pay, for every bhar of five hundred and fifty pounds weight of cloves, fifty-six rix-dollars, or one hundred and thirty-four gilders, and eight stivers ‡; but of this, the planters receive only fifty-one rix-dollars, the remaining five being divided among the village-chiefs, three being allotted to the rajah, patti, or oran cayo, one and a half to the oran touas, or elders, and one-half rix-dollar to the marin hos.

\* In chapter i. ii. iii. and iv. of the fourth, and chapter i. of the fifth book of vol. ii. of Valentyn's "Oud en nieuw Ost Indien." Tr.

† They are obliged to build the houses of their chiefs, and to furnish all the timber, gabbe-gabba, atap and other materials necessary for the construction, but the chiefs must maintain them while they are at work. Tr.

‡ The cloves cost the Dutch Company, at Amboyna, full six stivers per pound, or about 6½d. sterling. Tr.

For these and other reasons, the offices above alluded to, are eagerly sought after, and are only obtained for a certain sum of money, of which some of the governors who have ruled here in behalf of the Company, have not a little availed; I could enumerate some who have come here with very little property, and in the course of a few years, by these, and other means, have accumulated considerable wealth, and who, immediately upon their return to Batavia, have, in consequence, solicited leave from the government to transmit large sums of money to Europe.

The sale of these rejentships is not, however, an innovation of late date; for, from the beginning, every oran cayo paid fifty rix-dollars for his nomination, a patti, one hundred, and a rajah still more; so that the rajah of Noussanivel was even once obliged to give a gratification of three thousand rix-dollars.

The Chinese who frequent this island, as well as all the others in the eastern parts of India, where the Company have possessions, are not, however, very numerous at Amboyna, because there is very little trade, and scarcely any agriculture, two pursuits, to which, in general, that nation are very averse to. If a calculation of their number were to be made from the head-money which they pay, all the Chinese would scarcely be found to amount to one hundred individuals; but the frauds which are practised in the declarations made in this respect, are the cause that this cannot be considered as a proper rule.

They dwell here in a street, which is called after them, where they keep their shops, with all sorts of provisions, &c. for sale.

They are under the authority of a chief of their own nation, who is called captain, and who has at present a lieutenant under him, which was not formerly the case; but one of the governors was induced to institute this lieutenant's office, by means of a present of five hundred rix-dollars.

They do not intermarry with the Amboynese, but marry amongst each other; and if it happen that they are in want of women, they take Macasser or Bouginese girls for concubines.

In the month of April of the year 1775, a Chinese youth came purposely from Batavia to Amboyna, to marry the daughter of one of his countrymen who was settled here, and was a man of property. I went to see the ceremonies that were made use of; I came too late to see the beginning of them, which, I was told, consisted principally in the throwing backwards and forwards of an egg into the wide sleeves of the bridegroom and of the bride. I found them both sitting next to each other in a parlour, with their eyes fixed on the ground, as if meditating on what had been done, without speaking a word to, or looking at each other. An oblong little table stood before them, covered with red silk, which was embroidered with flowers of gold; upon it were set, before each of them, a little cup of tea, and three or four little china dishes with confectionary and boiled birds' nests. The bridal bed was in the same apartment; it was likewise hung round with red silk; but there was a partition made in it, separating the place where the bridegroom was to lie, from that of the bride; the former, however, occupied about two-thirds of the bed. The bride, who was a plump jolly maiden, nearly white, and pretty enough, wore a robe of red silk, with long and wide sleeves; a chain of gold hung round her neck, and down upon her bosom: on her head she wore a black bonnet, tapering upwards to a point, and adorned with three rows of jewels. The bridegroom was dressed in a similar robe of blue silk and cotton. They both kept their arms and hands constantly tucked into the sleeves. When the bridegroom stood up, he did it so slowly and cautiously, and without moving his eyes in the least, that he appeared perfectly like an image of wax, or an automaton moved by invisible mechanism.

The young couple were forced to endure the repetition of this tedious ceremony for three successive days, and always in sight of their nuptial bed, before they were allowed to perform the essential rites of marriage.

There are still many descendants of the Portuguese here, who, when their countrymen were forced to give up the dominion of the island to ours, chose to remain under the government of the Dutch.

The principal Amboynese Christians still bear Portuguese names, which their ancestors received at their baptism; but the Portuguese language is less spoken here than in any other part of India, and the number of the abovementioned descendants of Portuguese is not large.

Our countrymen who, in the year 1605, under the command of their admiral Stephen Van der Hagen, took the castle of Victoria, which was the chief settlement of the Portuguese upon the island, are now here absolute masters, as well over the peninsulas of Hitoe and Leytimor, as over the Uliassers, which comprehends the islands of Oma, Honimoa, Noussa, and Molaria, and likewise over Manipa, Kelang, Bonoa, the north coast of Bouro, Little Ceram or Hoewamoehil, and some places on Great Ceram; although a great part of the last century was elapsed before they were in full possession of the coast of Hitoe, as well as of Little Ceram, on account of the opposition they met with from the Quimelahas, or Ternatefe governors, the king of Ternate looking upon part of these countries as his territory; and from the four chiefs of Hitoe, who refused to be deprived of their independence, and openly resisted the arms of the Company. But these obstacles being now removed, the Company have little more to do than to oppose the attempts of foreign nations, and to prevent a clandestine trade with them, of which I shall say more hereafter.

CHAP. XVIII. — *Government at Amboyna. — Counsel of Polity. — Revenues of the Governors. — Vice-Governor. — Commandant of the Military. — Resident of Hila. — Chief of Separoua. — Fiscal. — Chief of Harouko. — Resident of Larike. — Chiefs of Bouro and Manipa. — Other Servants of the Company. — Allowance to the Company's Servants out of the Crop of Cloves. — Repartition of it among them. — Council of Justice. — Great Influence of the Governor. — Shameful Abuses. — Instance of unexampled Cruelty and Injustice. — Other Courts or Boards. — Clergymen and Ecclesiastical Matters.*

THE general administration of the affairs of this province is vested in a governor, who is appointed by the council of India, and is commonly one of the secretaries of the council, or one of the Company's servants at other out-factories; the second has seldom succeeded to the command, the reason of which I am ignorant of.

A council is appointed to assist the governor, consisting of the first qualified servants of the Company, whose advice and concurrence he is bound to have, in planning, arranging, and executing all matters of importance, as is the case in all the out-factories; but in how far the power of the governor is hereby circumscribed, is easily deducible from the consideration, that he possesses the power of dismissing the counsellors from the Company's service, and sending them to Batavia, where it does not often happen that a superior is cast in any dispute with an inferior; and the injured party seldom finds either redress or consolation, unless he have powerful friends to make interest in his behalf. Besides that such a governor is able by a thousand different means, and in indirect ways, to treat such as he is displeased with in so mortifying a manner, and to curtail their income and emoluments to such a degree, that they would rather thank heaven to be out of his hands.



But this evil has, alas! been of long standing; it will always be one of the most corroding cankers that consume the vitals of the Company, and will at last bring the society to destruction.

The revenues of a governor at Amboyna being but small, on account of the little trade which is carried on here, and the consequent extreme degree of fraud and oppression that prevailed here, induced the government at Batavia, with the approbation of the directors at home, to come to a resolution in the year 1755, to provide against the growing evil; and they therefore determined to give the governor a yearly additional allowance of six thousand rix-dollars, or fourteen thousand four hundred guilders\*.

This, added to other emoluments which long prescription has legalized, is sufficient to enable the governor to live according to his rank, without his being obliged to put such means in practice as one of the governors, whose name I shall not here mention, used to employ to double his revenues.

The vice-governor, or second person in rank, is a senior merchant, and at the same time head administrator, filling likewise, as is the custom in all the out-factories, the office of commercial book-keeper; he is also president of the council of justice, and of the orphan-chamber.

The third in rank is the commandant of the military, who has the rank, title, and pay of captain. He is the chief of all the troops in the whole province, the promotion of all the subaltern officers used formerly to be solely effected at his recommendation; but the advantages of this office were considerably curtailed by Mr. \* \* \*, who even publicly sold the places of serjeants and corporals in the military for fifty, or one hundred rix-dollars, both to the Amboynese and to the Europeans, without the commandant daring to complain of his proceedings, and it now yields but a poor subsistence.

Upon this officer follows the chief or resident of Hila, who has the greatest part of the north coast of Hitoe, and Little Ceram Hoewamoehil, under his management; next to Saparoua, his district is the most famous for the collection of cloves: he has a good income, and the rank of merchant.

The fifth in order is the chief of Saparoua; this factory lies in the island Honimoa; not only that island but also Nouffa Laut, and part of Great Ceram belong to his jurisdiction. The first named islands are very fertile, and yield more than half the annual quantity of cloves which are gathered in the province. The income of this resident is computed to yield only in amount to that of the governor.

Next follows the fiscal, who is equally a merchant in rank; his duty, as every where, is to take care that the property of the Company be not injured: he has likewise a concluding vote in the council of polity.

The sixth is the chief of Haroeko, upon the island of Oma, to which also belongs a part of Ceram: he is generally a junior merchant.

The seventh is the chief of Larike. This factory stands on the south-west coast of the land of Hitoe, and the island of Amblauw, which formerly belonged to Bourro, has lately been put under the jurisdiction of Larike.

The Soldyboekhouder, paymaster, or garrison book-keeper, is the eighth; who is, at the same time, *curator ad lites*, and president of the board of controul over marriages.

These eight, together with the winkelier, or purveyor, who, as well as the last-mentioned officers, is a junior merchant, make the nine, who are appointed as a

\* About 1300l. sterling. Tr.

council of polity, to watch over the interests of the Company in conjunction with the governor.

They have a secretary, who has also the rank of junior merchant.

Upon these follow the residents of Bouro and Manipa, the cashier, the secretary of the council of justice, who is at the same time first clerk in the office of the secretary of the council of polity, the negotie, en foldy-overdraagers, or the writers of the commercial and military ledgers, who are all book-keepers in rank; and lastly, the comptroller of equipment, who had before the rank of sea-lieutenant, but now that of sea captain.

To this province further belong four lieutenants of the military, and eleven ensigns.

In order to afford a better means of subsistence to all these placemen, a yearly repartition is made among them, according to their respective ranks, out of the annual crop of cloves; and I subjoin a statement of the repartition which was made in the year 1755, agreeable to the regulation established by the government at Batavia, on the 31st of May of the same year, which will at the same time give an idea of the quantity of cloves annually collected.

In the year 1755.

Factories.	Cloves collected in all.	Amount of ditto paid by the Company.		20 per cent. on the weight allowed to the Company's servants.	Amount of ditto.	
		Rix-d.	Stiv.		Rix-d.	Stiv.
At the chief settlements, New Victoria	lbs.			lbs.		
	115,767	11,787	8 $\frac{3}{4}$	23,153 $\frac{2}{5}$	2,357	21
At the factory,						
Saparoua	422,407	43,008	34 $\frac{1}{2}$	84,480 $\frac{2}{5}$	8,601	30 $\frac{3}{4}$
Hila	149,606	15,232	29 $\frac{1}{2}$	29,921 $\frac{1}{5}$	3,046	25
Haroko	39,231	3,994	20 $\frac{1}{2}$	7,846 $\frac{1}{5}$	798	42 $\frac{1}{2}$
Larika	49,114	5,000	33 $\frac{1}{5}$	9,826 $\frac{1}{5}$	100	25 $\frac{1}{5}$
Total	776,125	79,023	30 $\frac{1}{2}$	155,228	15,805	00 $\frac{1}{2}$

*Repartition among the Company's Servants of the above, viz. of the 100 Rix-dollars.*

	Per cent.	Rix-d.	Stiv.
To the governor and director	40	6322	0
To the senior merchant, second	12	1896	29
To the captain commandant	4	632	9 $\frac{1}{2}$
To the merchant, chief of Hila	7	1106	16 $\frac{1}{2}$
To ditto ditto of Saparoua	7	1106	16 $\frac{1}{2}$
To ditto fiscal	6	948	14 $\frac{1}{2}$
To the junior merchant, chief of Harouko	3	474	7 $\frac{1}{2}$
To ditto ditto of Larika	3	474	7 $\frac{1}{2}$
To ditto, garrison book-keeper	2	316	4 $\frac{1}{2}$

Carry forward. 84. 13,274. 0.

# ACCOUNT OF CELEBES, AMBOYNA, &c.

	Brought over	Per cent.	Rix-d.	Stiv.
	84		13,274	0
To ditto garrison purveyor	-	2	316	4 $\frac{1}{2}$
To ditto secretary of the council of polity	-	2	316	4 $\frac{1}{2}$
To ditto book-keeper, resident of Bourgo	-	2	316	4 $\frac{1}{2}$
To ditto cashier	-	2	316	4 $\frac{1}{2}$
To ditto resident of Manipa	-	1	158	2 $\frac{1}{2}$
To ditto secretary of the council of justice	-	1	158	2 $\frac{1}{2}$
To ditto writer of the commercial ledger	-	1	158	2 $\frac{1}{2}$
To ditto ditto of the military ledger	-	1	158	2 $\frac{1}{2}$
To the comptroller of equipment	-	2	316	4 $\frac{1}{2}$
To four lieutenants and eleven ensigns, together	-	2	316	4 $\frac{1}{2}$
		100	Rix-d. 15,805	00 $\frac{1}{2}$

This method certainly gives a considerable support to the superior servants of Company, and it is not at the charge of the Company, for it is the natives who pay and who are, at the same time, as it is said, well satisfied with it; for they were formerly so much defrauded in the weights of the cloves they furnished by the chiefs of the several factories, that it is beyond belief, without the Company deriving any advantage from it; wherefore the supreme government, not knowing how to do otherwise to prevent the extortion of their servants, put the matter upon the present footing; by which it is settled, that of every bhar cloves furnished by the natives, only eighty shall be delivered to the Company, while the other twenty are to form the perquisites of their servants, who, however, are obliged to sell their cloves to the Company at the same price paid to the natives. In addition to this, the council of justice and the fiscal are strictly enjoined to watch against all injustice or fraud on the receipt and weighing of the cloves collected, in order that any infraction of their regulations in this respect may meet with an exemplary punishment.

The council of justice consists of the second, as president, and six members, who generally assemble every fortnight, in a lower apartment of the stadthouse, or town-hall. All civil and criminal causes are decided here; but in the former, an appeal can be made to the council of justice at Batavia, and the execution of sentences in the latter may be suspended by the governor; yet if he approve them, whether they condemn the culprit to death, or to other corporal punishment, they are carried into execution; excepting, however, when the delinquent has the rank of merchant, and he is then sent up to Batavia, with the papers relative to the prosecution, and copy of his sentence; as is equally the case in all the other out-factories.

Although, by an express command of the supreme government, the governor here may not intermeddle in any matters which come under the cognizance of the council of justice, farther than to approve or suspend their sentences in criminal cases, yet some of them arrogate to themselves so much power in this respect, that, in the same manner as in the council of polity, they force a confirmation to their will, or bid open defiance to justice and honesty, if the members of the council refuse to abet their iniquity.

How much soever justice may be administered here with severity towards the inferior classes, it is a lamentable circumstance, and as worthy of abhorrence as it is notorious, that

that the greatest and most shameful crimes of persons of high rank, or of favourites, remain unnoticed and unpunished. I shall adduce one instance of this rank abuse of authority, from which a judgment respecting others may be formed.

The chief of a certain factory upon one of the adjacent islands, having for some time beheld, with eyes of desire, a young girl, scarcely fourteen years of age, and remarkably beautiful, who had been adopted by a person at Amboyna, and brought up in his own house, gave him and his family an invitation to pay him a visit. The man accepted it with confidence and pleasure, and went thither with his wife, his daughter, and this girl. When, in the evening, the guests retired to rest, it was so arranged by their host, that the object of his licentious pursuit was conducted to a bed in a distant and solitary apartment; there being, as it was pretended, no beds, or room, in or near those occupied by her friends.

In the dead of the night, when all but the wakeful eyes of lust were closed in deep repose, this wretch stole to the apartment of the innocent maid, whom he had thus inveigled into his snares, and completed his long-concerted scheme of villany, by the most brutal violation of her charms. The poor victim of his lust was found the next morning bathed in tears; and scarcely knowing that she was undone, related the whole exactly as it happened. The perpetrator of this deed of violence most strenuously denied the accusation, but he pretended that he very well knew who was the ravisher; it was, he said, one of his slaves, an Amboynese, who had frequently before made use of his master's name to attain his purpose, and cover his enormities. Neither the strong denial of the slave, nor the most solemn asseverations of the girl, that the master, and no one else, had perpetrated the base action of the night, could ought avail: the monster added murder to rape; and the wretched slave was tied up and whipped so unmercifully and incessantly that he expired in a few minutes.

As this man was a gentleman of rank, and one of the particular minions of the governor, the matter was never enquired into, and all reports concerning it were smothered as much as possible.

A kind of provincial court is likewise established here, consisting in part of the Company's servants, and in part of the heads of some negrees, of whom the rajahs of Noussanivel and Soya are the first, and follow in rank upon the members of the council of polity.

The governor likewise convokes from time to time an assembly of the native chiefs, in which he makes such orders public as he may have received from the government at Batavia, or which he may think necessary, and commands them to see them executed; for example, when a certain number of clove-trees are to be planted or destroyed, and other similar matters.

Besides these, there are an orphan-chamber, a court of assignees for bankrupt or intestate estates, a board of controul over marriages, and a court of common pleas.

The number of clergymen belonging to this government is, I believe, when complete, six \*, viz. four at the chief settlement and fort of New Victoria, one at Hila, and one at Sapoura; but when I was there, there was but one, the others being gone on a church-visitation to Banda, and the south-western islands belonging to that government.

He that remained had been for a long time a journeyman bricklayer in the province of Gelderland; but his trade not succeeding to his liking, he went out in the year

\* On looking into the memorial of Governor Mossel, respecting the general state of India, of the 30th November 1753, I perceive that the number of clergymen in the province of Amboyna, was then settled at three. S.

1769, as krankbezoeker \* to India; and, together with several others, he was sent back to Holland at the expence of Governor Van der Parra, to be fitted for taking orders, and he had returned the preceding year as a qualified divine, and had shortly afterwards been sent to Amboyna, where there was little likelihood of his evangelical mission being remarkably exemplary or successful.

As this person did not understand the Malay language, and had also very little inclination to attain it, the divine service at present administered in the Malay church, was confined to the reading of a sermon written in that language, which was effected by a krankbezoeker, who performed the office of clerk, and who was, as the above-mentioned clergyman was pleased to say, when he had been scarcely a day or two at Amboyna, the only religious man on the island. However uncharitable and rash the expression of this opinion was, it is, however, a fact, that I met with very few people here who had a tolerable knowledge of the doctrines of the reformed religion, or even of the moral duties prescribed by it.

There is a very considerable number of nominal Christians, and who have received baptism, as well on the peninsulas of Leytimor, as at other places. By an annotation in a resolution of the council of polity at Amboyna, of the 11th of March 1774, it appeared, that the Reverend Mr. Van Einbrug found, on a church-visitation (which he had, however, by some obstacles been prevented from completing), in a part only of the places belonging to this government, the number of twenty-one thousand one hundred and twenty-four nominal Christians, but only eight hundred and forty-three church members.

The superstitious respect which these nominal Christians pay to our clergymen, and a few outward signs of religion, are the principal marks by which they are distinguished from the rest of their countrymen.

Besides the regular clergy there are kranbezoekers, and likewise stationary and itinerant school-masters, who are all paid by the Company, and instruct the children of the Amboynese in reading, writing, and psalmody, for which purpose a school is established in every negree, to which each inhabitant sends his children free of expence.

CHAP. XIX. — *The Europeans at Amboyna; — Their Mode of living. — The Women. — Dress. — Sedan-chairs. — Account of the Town; — Streets; — Churches; — Stadthouse, or Town-hall; — Hospital; — Houses. — Springs; — Rivers. — Garden of the Governor. — Fortrefs of New Victoria; — Its Advantages and Defects. — Natural Strength of the Bay. — Proposals for new Fortifications. — Other little Forts in this Province. — Buildings in the Castle, not yet completed. — Expence of the Erection of the Fort, &c.*

THE number of Europeans, at least of those who have any quality in the service of the Company, is so small, that little can in general be said with respect to any peculiar mode of living they may observe. One thing, however, is immediately an object of remark to strangers, and that is, that in the forenoon more strong liquor is drank, either arrack or geneva, than at Batavia, or in the west of India, though at Macassar it is almost the same; ten or twelve drams is not an uncommon whet in a morning at Amboyna; and on setting down to dinner, a glass of spirits is the first thing presented to the guests to strengthen the stomach, and raise an appetite.

\* Krankbezoeker is perfectly synonymous with ziekenrooster, for an explanation of which term see the note to page 515 of the first volume; the former is literally "a visitor of the sick," as ziekenrooster is "comforter of the sick." Tr.

I found little pleasure or sociability here ; which, I was told, was to be ascribed to the late governor, whose distrustful temper made him look upon all social meetings with jealousy ; this did not seem improbable to me, as I found that a short time before he left the island, and when he was not an object of apprehension or hope, as before, both social intercourse and innocent gaiety became daily more prevalent, which afforded much satisfaction to the new governor.

The common Europeans, both soldiers and mechanics, have very little opportunity of earning any money here, and their pay affords them little else than sago, and at most rice, with a little fish, for food, and water, sagwire, or arrack, for drink. The soldiers make a very shabby appearance ; their uniform is made of blue linen, and hangs in tatters about them, without shoes or stockings, excepting, indeed, the body-guards of the governor : they attend the parade bare-footed, and are badly disciplined ; to this picture may be added, an unhealthy, dropsical, and feeble habit of body, occasioned by the immoderate use of sagwire, to which, too, is attributed the circumstance of their all having swollen and ulcerated legs ; though this latter complaint is as rife among the sailors and mechanics as among the military : their number is never complete, notwithstanding the supplies that are sent every year from Batavia.

There are very few women here born of European fathers and mothers ; but there are a great number of a mixed race, as many Europeans take Indian women for concubines, whose children are afterwards legitimated, and incorporated into the European nation\*.

Married women live here very retired ; they do not often mix in company with the men, and still more seldom enter into conversation with them ; every thing that is addressed to them is answered by a single affirmative or negative. I was told, that being always accustomed to speak the Malay tongue, they felt awkward, and were apprehensive of expressing themselves wrong in the Dutch ; yet I observed the same reserve, and want of power to carry on a conversation when they were speaking in the Malay language, as when they were addressed in Dutch. Society is, then, here divided into male and female, by which, in my opinion, all company is rendered dull, formal and disagreeable.

The dress of the ladies is like that of those at Batavia. The men dress in the European fashion, with this peculiarity however, that the greatest contrast in colours is sought after, for instance, blue silk breeches, with scarlet waistcoat, and black or dark brown coats, and *vice versa*.

No carriages are seen here ; indeed there are no roads fit for them, for the country is every where both mountainous and rocky, so that it can even scarcely be traversed on horseback. A sort of sedan-chairs are made use of in the room of carriages, with which the Amboynese run up and down the most dangerous paths in the mountains, without there being hardly a single example of their letting them fall, or overturning them.

The town of Amboyna, if a place without gates or walls may deserve that name, lies on the peninsula of Leytimor, at the north-west side, about half way between the point of Nouffanivel and the pass of Baguwala, in a sloping plain at the foot of the mountains of Soya, which surround it behind, and end at the Rooden-berg, or Red hill, about two hundred and twenty rods, east-north-east from the castle.

\* At Amboyna, the children of European fathers and Indian mothers are called Mixtices, who are of an olive complexion ; the children of a Mixtice and an European are called Poestices ; and those of a Poestice and an European are Castices, who are nearly as fair as Europeans ; after which no distinction is made, but the children proceeding from further unions are reckoned among the Europeans. Ta.

The town itself, without the adjacent negrees, which may be considered as suburbs, forms an oblong, irregular square, bounded by the Bato gadja, or Elephant's river, on one side, and the Way tomo on the other. According to the plan of the town made and delineated in the year 1718, since which time no material alterations have been made in it, its length is full three hundred roods, from north-east to south-west, and its breadth full one hundred, from the bay, south-eastward.

The interfections, called streets, cross each other at right angles; many of them are pretty wide, but none of them are paved.

Of the public buildings, the Dutch and Malay churches were both much damaged and nearly destroyed by the violent earthquake of the year 1755; the former in so far, that it was forced to be wholly pulled down, in order to be entirely rebuilt: in this work, however, little progress had been made, when I was there, and service was, in the mean time, performed under a shed, built of gabbe-gabbas, and covered with atap: the Malay church was split in such a manner from top to bottom, that for many years it has not been feasible to perform any service in it, which is now done on Sunday afternoon in the shed appointed to serve as a substitute for the Dutch church.

The stadhouse, or town-hall is likewise an old and ruinous building; behind it is a large square area, round which are many little apartments, which serve for places of confinement for prisoners.

The hospital stands just out of the town, on the other side of the Way tomo. It was entirely rebuilt a few years ago. Near it is a house appointed for the residence of the superintendant of the hospital. This hospital is one of the best, and fittest for the purpose, belonging to our Company, which I have seen in India: the building is a very good one, the sick are well treated in it; and by the excellent attention of the present superintendant, Mr. Hengeveld, they are kept extremely clean and neat.

The house of the governor, which was formerly the Company's cloth warehouse, and is still known by that name in their books, has not much to recommend it; its appearance is mean, and there are few, and those very indifferent, rooms in it.

The houses are, in general, of one story, many of them are built of wood, and almost all are covered with atap; this mode of building is adopted because of the dreadful and frequent earthquakes to which this country is subject. The houses are commodious enough, according to the custom of the country, but have not a very elegant appearance. Instead of glass, frames of matted cane are used for the sake of air, and likewise, I believe, not a little in order to save expence. Most of them have little gardens, or large square yards behind them, in which there is commonly a well of very good water.

Springs are very numerous here: going only along the shores of the bay, and scooping, where there is the least bit of beach, a little hole with one's hand in the sand, it is immediately filled with sweet fresh water, and that even sometimes at no greater distance than five or six feet from the salt water. This owes its cause, in all probability, to the nature of the soil, which is every where porous and sandy, and imbibes the rain almost as soon as it has fallen. I have seen that in most places, after the most incessant and violent rains, which lasted three days, and raised torrents of water rushing through the town, there have been no visible marks left, at the end of only two hours, of its having rained at all: and I was assured that it was exactly the same case, when the rains continued for three or four weeks, as frequently happened during the bad monsoons.

The rivers which run along or through the town, or the adjacent negrees, are the Bato gadja, or Elephant's river; the Way tomo, which runs between the town to the south-



south-west, and the negrees Soya and Mandhika to the north-east; the Way nitoe, which divides the negree of Italong in two; and the Way atlat, which runs between this last and the Moorish negree.

The three first have their source in the mountains of Soya, and the last descends chiefly from the Roodenberg.

I have before observed that these rivers in the good monsoons, or dry seasons, can only be looked upon as little rivulets, moistening but a small part of their beds; but that in the bad monsoons, or rainy seasons, they swell up to a considerable height, and run with such force and rapidity, upon the rain continuing any time, that they carry away all before them, and even the bridges which are built over them.

Just above the town, upon the Bato gadja, a garden has been laid out, and a good house built by Governor Van der Stel, at the expence of the Company, which very much resembles that called Vengleegen, which his brother, when governor at the Cape of Good Hope, made in Hottentot Holland, also at the expence of the Company. This is the only garden of consideration that I saw at Amboyna, though there are here and there a few others which are called gardens, but which solely consist of a wood of sago trees, and a plantation of cocoa-nut trees; that, however, of Hative excepted, which at present belongs to the engineer Van Wagner, and which may be called a handsome piece of ground for Amboyna.

As the keeping of the first-mentioned garden was a considerable annual expence to the Company, the government at Batavia thought fit, in the year 1769, to transfer the same to the governor for the time being, for a certain sum of money, for which his successor is obliged, in his turn, to take it over: Mr. Van der V—— paid, if I am not mistaken, two thousand rix-dollars \* for it to the Company.

Near it is a menagerie, in which are kept, among others, some very beautiful speckled deer.

The governors generally reside at this place, when there is nothing to call for their presence at the town, or when there are no ships in the bay.

The chief, if not the only fortress which the Company have at Amboyna is the castle, or fort; which, after it was rebuilt, was called New Victoria, as the old fort, called Victoria, which had been erected by the Portuguese, being an oblong square, with four bastions, was so much damaged by the earthquake of the year 1755, that it was thought more eligible to build an entire new fort, than to repair the old one.

It stands close to the water-side, a little to the west of the mouth of the Way Nitoe, and exactly opposite to the road, where ships commonly lie at anchor.

I took much pains to procure a plan of it, but the strict integrity of the present acting engineer, Mr. H. E. Von Wagner, was proof against the solicitations of friendship, and however much in other things he proved both willing and anxious to give me every testimony of his inclination to render me service, I could not in this instance, persuade him to lend me a plan of the fort for ever so short a time, in order to take a copy of it; I cannot therefore say any thing respecting the dimensions of the works, and shall only describe the general appearance of the fort.

Its shape is very irregular: on the land-side it has three entire and one demi-bastion, which, with their curtains, form part of a regular heptagon; on the water-side there are two bastions, in the curtain between which stands the water-gate, in the same manner as the land-gate opens between the two opposite bastions on the land-side.

The curtain, or battery, which runs north from the easternmost land-bastion, is met by a similar one coming from the easternmost sea-bastion, making an obtuse angle of between ninety and one hundred degrees, so that the line of defence of the easternmost land-bastion runs exactly upon this angle; and the flanks of these bastions are therefore without defence, which is an unpardonable fault in the first construction of the fort, as the nature of the ground did not require this irregular mode of fortification: Mr. Von Wagner intended to remedy this fault, as much as possible, by making a detached bastion before the angle made by the two batteries, by which these two flanks would be defended.

From the demi-bastion on the west side, a battery runs northward, and being met by another coming from the westernmost sea-bastion, they form together an inverted obtuse angle.

The sea-bastions, which are liable to be attacked by the greatest force, are carried up somewhat higher, and are rather larger than the others; they are covered with bonnets in the middle of their faces, in order to be the better provided against an enfilade.

A horn-work extends before these bastions, and covers the curtain between them; its projecting angles command the shore both above and below the castle, by which a landing any where near it is rendered very difficult, if not impossible.

All these works are built of brick, for which purpose many brick-kilns have been erected here, where very good bricks are made.

They were then about making a covered-way, to begin from the flank of the western sea-bastion, and to run round the fortress to the other side of the eastern sea-bastion.

The whole is encircled by a wet ditch, which is the same that formerly run round the outworks of the old fort.

This is certainly the best fortification belonging to the Company, that I have seen, in India. Yet it is by no means favourably situated on account of the near neighbourhood of the Roodenberg, and the lowness of its site, by which, in my opinion, it would not be able to make any long or effectual resistance, if the enemy were once landed, and could get their artillery on shore, so as to erect batteries on the surrounding heights.

The same defect occurs likewise on the side that looks towards the bay; for ships, if properly moored, can enfilade most of the lines of defence at high water; the water rising here in spring tides full ten feet; and the horn-work, which is full one-half lower than the main body of the place, is consequently still more exposed.

I purposely add the supposition that the ships be properly moored; for the greatest strength of the place rests upon the impracticability of bringing ships to attack it in a proper situation. As there is no anchoring ground except close to the shore, the ships are exposed to the fire of forty or fifty pieces of heavy artillery long before they are able to let go their anchors, and put springs upon their cables, in order to haul the vessels round; and all this is not so easily done under such a fire, if the artillery upon the batteries be but well served.

The nature of the bay too, the prevailing winds which blow here, and the calms which are not unfrequent, together with the strong currents setting continually in and out of the bay, are formidable obstacles to prevent ships from forming their attack whilst under sail, and much more from making good a landing here; for which reason a landing must be attempted at a more convenient place, which might perhaps be found, either in the bight near Hamahoe, or in the Portuguese bay.

And

And although the old fort of Victoria is not to be compared in point of strength to the present one, I do not believe that our people would ever have succeeded in the year 1605, in getting possession of Amboyna, or rather of the peninsula of Leytimor, attacking it at least as they did at this place, had the Portuguese defended this settlement with the same bravery as they did their other possessions, and not given it up in so cowardly a manner.

There is another great defect, at least it appeared in that light to me, namely, the great extent of the fort. It is so large, that if all the works were to be properly manned, all the military to be found here would scarcely be sufficient to defend one half of them. Moreover, no less than a hundred pieces of cannon are requisite to provide all the batteries as they ought to be, and there are no more than fifty or sixty cannoners in the whole province.

In order to fortify the bay still more, the engineer, Von Wagner, has proposed to erect two new batteries, viz. one a short mile south-west of Victoria, at the mouth of the Elephant's river, to command the part of the bay called the Vryman's, or Free Merchant's Road, and to be able to rake the ships which may lie to the westward of the castle; and another upon the point of the Laha, for which all ships coming up the bay must steer in a straight direction, in order to keep close in with the windward shore; which proposal has met with the approbation of the supreme government at Batavia.

Perhaps another battery near or upon the point of Alang, would be of still greater utility; for ships entering the bay must equally steer straight for and very close along it, in order not to be in danger of being driven to leeward of the bay by the currents.

I did not see any of the other little forts which the Company have at Hila, Sapoura, Harouko, and Larike; but according to the information I received respecting them, they are of little consequence, and at most strong enough to keep the natives in awe\*.

The buildings within the fort of New Victoria are not yet all finished; there are, however, already two powder magazines, the rice and spice warehouses, the naval storehouse, the provision-warehouse, the dwelling-house of the comptroller of equipment, and the guard-house at the land-gate; but no beginning has yet been made with the government-house, or the dwellings for the senior merchant, and the captain-commandant of the military; the water-gate is likewise not entirely completed.

Mr. Van der V—— told me, that the erection of this fortress had already cost the Company two million of gilders†: but the engineer Von Wagner stated the expence of it considerably lower.

\* The other forts in this province are: upon the island of Amboyna, Fort Amsterdam, which mounts sixteen guns, at Hila; Fort Rotterdam, at Larike; the redoubt Middleburg, at the pass of Baguwala; and a small triangular fort near Oerien, called Flushing: upon Bouru, the palisadoed fort Defence, mounting fourteen iron guns: upon Manipa, the redoubt Wantrouw, or Dillrust, of the same force; upon Hocwamoehil, Fort Hardenberg at Cambello, and Fort Overburg at Loehoe: upon Nouffalaut, a small redoubt of four guns, called Beverwyck: upon Honimoo, the redoubt Velsen, having five guns, at the point of Tetawaroe; the redoubt Delft, of six guns, at Porto, and Fort Duursteede at Sapoura; and upon Oma, Fort Zeelandia at Harouko. The capture of Amboyna and Banda by the English, will afford opportunities to us of becoming fully acquainted with every particular respecting those remote but valuable and interesting settlements. It is to be hoped that some of the gentlemen of the navy or army who went upon that expedition, will favour the public with an account of these acquisitions; men of genius and observation are not wanting either among our naval or military officers, and a narrative of the expedition alluded to, may not only be said to be desired, but also to be expected, from some of them. Tr.

† About 181,200l. sterling. Tr.

CHAP. XX. — *The Clove Trade; — Endeavours of the Dutch to retain it exclusively to themselves; — Attempts of the English to participate in it. — Garrisons and Establishment at Amboyna. — Profits and Charges of this Province. — Reflections on the Clove Trade; — Large Stock of Cloves; — Endeavoured to be diminished by Extirpations, and by burning great Quantities. — The Hongitogt, or yearly Expedition of the Governor round Ceram, &c. — Earthquake at Amboyna.*

THE chief, if not the sole advantage derived to the Company from the possession of Amboyna and its dependencies, is the collection of cloves, and the mastery of this article to the exclusion of all other nations, by which they are enabled at pleasure to raise or lower the price.

This gave rise, at an early period after the conquest of the island, to much jealousy and animosity between the Dutch and the English; and these disputes did not terminate with the expulsion of the latter from the island, but were made a pretence many years afterwards for declaring war against the republic: they were not finally settled till the conclusion of the peace of Breda, in the year 1667.

The Company would not, however, ever have succeeded in securing to themselves the exclusive trade in this spice, which is spontaneously produced in all the adjacent Molucca islands, had they not endeavoured wholly to transfer and confine the cultivation of it to Amboyna; partly by subduing the princes of those islands by force of arms, and prescribing to them such conditions of peace as they found convenient, the principal of which had relation to the clove-trade, especially with respect to the Kings of Ternate, Tidore, Machian, and Bachian, compelling them not to sell any of the cloves produced in their dominions to any other nation; and partly by forcing them, about the middle of the last century, to destroy all the clove-trees which grew in their territories, for which they were to receive an equivalent in money.

In the same manner the Company have entered into a contract with the King of Bouton, to whose dominion many places belong which yield spices, that he shall not only allow the extirpator, whom they dispatch every year on an expedition through the islands, to perform the service on which he is sent, but shall also afford him every assistance in doing it.

Yet, notwithstanding all this, and how far soever they may be able to extend their extirpations in the circumjacent countries, they will never be able wholly to prevent other nations from procuring spices without their intermediation. There are too many islands, and too widely dispersed, that produce these commodities, of which neither they nor their allies are in possession, or possibly can be, without entirely exhausting themselves by the erection of numerous fortresses, which are indispensably necessary, if all intercourse with foreign nations must be prevented\*.

Thus

\* However assiduous the Dutch are in the destruction of spice-trees, they never have or can succeed in extirpating them all. It is only in places of easy access, and near the sea, that they are generally cut down, but they grow abundantly in many retired spots of the large and woody island of Gilolo, in the recesses of Ceram, upon Ouby, Mysol, in the forests of Bachian, as well as upon Cadoepan, and many other islands, where they are inaccessible to the destructive ax of the extirpator; and what is actually destroyed, is not, perhaps, the hundredth part of the trees producing the precious spices. The parties sent out on such business generally consist of a military officer, or some civil servant belonging to the Dutch, with three or four European attendants, and perhaps twenty or thirty Buggue's soldiers, with their officer. They generally make it a party of pleasure; and the Buggue's officer (while the chief is regaling himself in the heat

Thus the English formed a settlement some years ago upon the island Xullock, lying north of the Moluccas; but as the indifferent quality of the soil, and other circumstances, did not answer their purposes in forming such an establishment, they changed it for Balambangan, an island on the north-east coast of Borneo, in order to lay the foundation there for a place of trade, whither the clandestine dealers in spice might bring their goods, and thus furnish our rivals with the articles out of which we endeavour to keep them.

The garrisons which the Company keep in this province, were fixed, in the year 1752, at nine hundred men, including the seamen and the pennists. His Excellency, Governor Mossel, says, in his further memorial, written in the year 1753, that this number is sufficient, since Amboyna has nothing to fear from an European enemy\*.

By that memorial, the profits which accrue annually to the Company upon the sale of goods, are estimated at forty thousand guilders; the proceeds of the rent of lands, excise duties, a duty of five per cent. upon the sale of real property, the stamp duties, and the produce of the permits granted for the importation and exportation of private merchandize, are computed to be thirty thousand guilders; and all the receipts are, consequently, taken at seventy thousand guilders; which sum, by a further memorial of economy, was reduced to sixty-six thousand guilders: and even this latter sum is not now drawn from those objects; sixty or seventy bales of coarse piece-goods, which are annually disposed of here at an advance of from seventy to eighty per cent., the good vent whereof likewise depends much upon the success or failure of the crop of cloves, do not suffice, with the other revenues, to make up that amount.

According to the abovementioned memorial of Governor Mossel, the annual charges of this government ought not to exceed one hundred and eighty-five thousand guilders, in order that the defalcation on the four eastern provinces should not be more than four hundred thousand guilders a year; but, by the latest memorial, the charges of Amboyna were stated at *f*.176,518. 0. 0; and, in the five last years, they have averaged yearly *f*.265,549. 10. 11, so that they actually amount to *f*.89,031. 10. 11 every year more than Mossel stated them at †.

These

heat of the day) sets off to the woods with some of his men, where he executes his commission just as it suits his convenience; taking care to bring back plenty of branches, to shew his assiduity, when, perhaps, they are all from one tree. Sometimes a serjeant at an outpost, to get into favour with his chief, sends an account of his having discovered, on a certain spot, a parcel of spice trees, with news, perhaps, at the same time, that he has destroyed them all: possibly the chief's domestic might inform him of many more such spots at hand, but they are too wise to say much on so delicate a subject. TR.

\* In 1776-1777, the whole establishment at Amboyna consisted of fifty two in civil employments, three clergymen, twenty-eight surgeons and assistants, forty-six belonging to the artillery, 174 seamen and marines, 657 soldiers, and 111 mechanics, in all 1071 Europeans; besides fifty nine natives in the Company's service. TR.

† The calculations of General Mossel of the revenues and charges of the several establishments of the Dutch East India Company, are always particularly mentioned in this work, and contrasted with the actual amounts of each in the year 1779 (that is, from the 1st of September, 1778, to the 31st of August, 1779), that year being in the books of the Company one which they call *het boekjaar*, or year in which a general review is taken of all their concerns, as is done every ten years; because the calculations of that gentleman have not only formed the basis upon which the revenues and charges of each settlement, as stated in the famous "*Histoire Philosophique et Politique*," of Abbé Raynal, have been computed, but have also obtained a great and almost decisive authority in establishing the advantages or disadvantages reaped by the Dutch from their Indian possessions. In the course of this work they frequently appear to be considerably different from the actual amount of the receipts and expenditure, and are, in fact, rather calculations

These, as well as the charges of the government of Macaffer and Ternate, must be defrayed out of the profits upon the cloves, nutmegs, and mace, which must, likewise, contribute towards making good the expences of the Company at Batavia and at home; but can any favourable expectations of future advantage be entertained on this head, when we consider the great decrease which is experienced in the sale of the first named spice? Three millions of pounds remaining still in the warehouses at Batavia, of which no more than one-fifteenth part can be annually disposed of in the Indies, together with a stock on hand in Holland, large enough to supply the consumption of Europe for the space of ten years, and the quantities of cloves that from time to time are committed to the flames by the Company, in order to lessen their superabundant stock, form proofs enough of the decrease of the clove-trade, and do not require further animadversion than the bare mention of them \*.

calculations of what these ought to be, than what they really are. In 1779, the charges of Amboyna were £201,082; and the whole of the revenues, including the profits upon the sale of goods (five per cent on the sale being allowed to the governor and second, two-thirds to the former, and one-third to the latter), amounted to no more than £48,747, leaving a balance against the Company of £152,335, or about 13,850*l.* sterling. *Tr.*

\* Every clove-tree is calculated to produce annually, upon an average, two, or two and a half pounds of cloves, so that the yearly crop is at least one million pounds per annum from the 500,000 clove-trees allowed to be cultivated; much larger crops are frequently made, though in some years they fall materially short, and yield but a trifling quantity. One of the largest sales of cloves made in Holland, was in the year 1714, when 435,427 pounds were sold; in 1758, no more than 200,000 pounds were sold; in 1778, 234,271 pounds; and in 1788, 400,000 pounds; and about 150,000, or 200,000 pounds are annually disposed of in the Indies. The quantities of cloves always remaining over in the hands of the Company, notwithstanding their continual extirpations, must, therefore, be immense; they endeavour to moderate this superfluity by burning large quantities of spices from time to time; Sir William Temple says, in his *Observations upon Holland*, that a Dutchman, who had been at the Spice-islands, told him, that he saw, at one time three heaps of nutmegs burnt, each of which was more than an ordinary church could hold; in 1760, M. Beaumare saw at Amsterdam, near the admiralty, a fire of spices, the fuel of which was valued at 1,000,000 of livres, and as much was to be burnt on the day following; the translator of this work has himself been witness to the burning of large quantities of cloves, nutmegs, and cinnamon, upon the little island of Newland, near Middleburgh, in Zealand, the aromatic scent whereof perfumed the air for many miles around. Although the Dutch have thus, by all the means in their power, endeavoured to counteract the indulgent bounty of heaven, they have not, in any instance attained their object; for, exclusive of the impossibility of preventing the spontaneous production of spices in the extensive woods of hundreds of islands, of which they scarcely know the names or situation, and the constant clandestine trade carried on in spices, by the Papuas Ceramers, Bouginese, and Chinese, the consumption of, and demands for cloves have so much decreased, that the monopoly is no more worth the expences of retaining it exclusively: and in regard to nutmegs, they have been the dupes of their own avarice; for, confining as much as possible, the cultivation of that spice to the islands of Banda, it was nearly annihilated there in the year 1778, by a violent hurricane and earthquake, and few supplies of consideration have been obtained for several years afterwards. When Admiral Rainer took possession of Amboyna, in 1796 he found in the treasury, 81,112 rix-dollars, and in store 515,94*lb.* of cloves. The importations into England, by the East-India Company, since the capture of the Spice-islands, till the present time (October 1798), have been as follows:

cloves, 817,312 pounds,

nutmegs, 93,732 do.

mace, 46,730 do.

besides considerable quantities of each in private trade and privilege goods, namely,

100 casks	}	cloves, weighing we suppose, about 30,000 <i>lb.</i>		
20 casks				
81 casks				
76 casks				
29 chests	}	nutmegs,	do.	36,000
7 boxes				
12 casks				
167 basks				
1131 chests	}	mace,	do.	240,000

On a superficial view, when we are told that every pound of cloves only stands the Company in  $4\frac{1}{2}$  stivers, the mace in  $9\frac{1}{2}$  stivers, and the nutmegs about half as cheap as the cloves, it should seem that the spice-islands afford an inexhaustible source of riches, since the selling price exceeds the cost in so uncommon a degree; but if we go farther, and consider that these three articles of trade must bear the whole expence of all the four eastern provinces, to which must be added the charges of seven or eight ships, employed in fetching them, it will be found that they, in fact, cost very dear \*.

The great superfluity of cloves has, indeed, been endeavoured to be prevented by diminishing the number of clove-trees, from time to time, by extirpations; but by this means the Company ruin their Amboynese subjects; and if fortune should ever again favour them, and the vent of this article be again as large as heretofore, they would find that they were possessed of the soil for producing them, but not of clove-trees, which require more years to arrive at maturity, than moments to be destroyed.

I should now have to make some mention of the hongitogt, or yearly expedition of the governor of Amboyna, with a fleet of corrocorros, round Ceram, and the neighbouring islands, if Valentyn had not so amply related every particular of it, that I can only add, that it did not take place during the time I was at Amboyna, the month of October being the period appointed for it †.

Between

\* See "Secreete bedenkingen over den waaren staat der Nederlandfche Compagnie," by J. Mossel, Sections liii. and liv. S.

† The hongt, or fleet of armed corrocorros of Amboyna, was instituted by Governor Houtman, in the beginning of the seventeenth century. In the month of October, the fairest season of the year, they assemble in the bay of Amboyna; all the different rajahs, and orancayos, are then bound to appear with corrocorros, in order to accompany the governor in this annual expedition round the islands under his jurisdiction. It is undertaken for the purpose of examining into and deciding upon all disputes that may arise among the Indians that are subject to the Company; of preventing and discovering all illicit trade; and of destroying such spice-trees as are found growing in places where they are not allowed: one chief purpose, however, is, that numbers of the common people, who are obliged, by their tenure, to serve the Company during one month in the year, are by this means taken away from the collection of the crop of cloves which falls in about this time, and which is, in consequence, much lessened for want of hands, it being, as we have before seen, a great object of policy in the Company to prevent a too abundant supply. They are obliged to maintain themselves during this expedition, which lasts five or six weeks, except that the Company allow each man one and a half, or two pounds of rice per day; and to the orancayos, when they set out, three gallons of arrack, twelve pounds of pork, or beef, and a measure of rice. This expedition has, at different times, been neglected; but the annual performance of it has been frequently enjoined by the government at Batavia, and in particular in the years 1680, 1688 and 1693, when the coasts of Ceram were greatly infested by the incursions of the Papuas. The Hongt-fleet generally consists of forty, fifty, or sixty vessels; when complete, it should consist of sixty-one corrocorros, viz.

- 6 from the island of Oma
- 3 from the coast of Ceram, under Oma
- 4 from the island Mauipa
- 14 from the district of Fort Victoria, upon Amboyna
- 6 from the peninsula of Hitoe
- 1 from the coast of Ceram, under Hitoe
- 8 from the island Honimoa
- 3 from the island Nouffa-laut
- 8 from the island Ceram
- 3 from the district of Larike
- and 5 from the island of Bouro.



Between the 18th and 19th of April, we felt here an earthquake, which lasted full five minutes. The dull rumbling noise that accompanied it, and the undulating motion, seemed to run in a direction from south-west to north-east. The thermometers did not undergo any change before, during, or after the shock. The air was clear, and the weather was dead calm. The water in the bay was also much agitated: my ship, which lay, at that time, at the pierhead, received a very violent shock, being impelled forwards, and driven back again, with great force. The north-east wall of the newly-erected rice-warehouse in the castle was rent by this earth-

If any village is unable to join the fleet with their appointed corrocorsos, or is excused from the service by the governor, they must burn a kiln of lime for the Company; and if they wilfully neglect it, they are subject to arbitrary punishment. The governor used formerly to carry his flag on the corrocorto of the rajah of Nouffanivel, but the rajah of Titaway has now that privilege; this corrocorto is one of four gnadjos, or ranks of paddlers, and is provided with two or three handsome apartments for the accommodation of the governor, who is attended by a guard of fifty or sixty soldiers. The fleet is divided into three divisions, the first being all corrocorsos of Christian chiefs, the second of Mahomedans, and the third partly of Christians and partly of Pagan chiefs. In order to give an idea of the force of such a fleet, we subjoin a statement, from Valentyn, of that which went on the Hongi expedition of the year 1706, under Governor Van der Stel; it consisted of fifty-six corrocorsos, namely,

Seven of four gnadjos, or banks of paddlers (quadrirèmes).

Corrocorsos.	Manned with		Armed with		Corrocorsos.	Manned with		Armed with	
	Paddlers.	Other men.	Swivels.	Musketoons.		Paddlers.	Other men.	Swivels.	Musquet.
1	77	24	2	1	1	64	20	0	15
1	71	36	1	5	1	60	20	2	0
1	67	36	0	2	1	60	16	2	2
1	64	22	0	0					

Forty-nine of three gnadjos (trirèmes).

1	95	18	1	2	1	55	12	1	0
1	70	20	3	3	1	55	10	0	1
1	70	20	0	1	1	54	22	0	0
1	70	12	1	0	1	54	7	0	0
1	70	10	1	1	1	53	18	2	3
1	65	25	0	2	1	53	18	1	1
1	65	21	1	1	1	53	10	2	1
1	62	20	4	0	1	53	10	1	1
1	61	24	3	0	1	50	25	1	4
1	61	16	1	1	1	50	20	1	3
1	60	20	2	3	1	50	20	0	2
1	60	20	2	2	1	50	20	0	0
1	60	20	1	3	1	50	20	0	0
1	60	10	1	1	1	50	13	0	5
1	60	10	1	0	1	50	13	0	0
1	60	10	0	1	1	50	10	0	0
1	59	15	0	0	1	48	16	1	0
1	58	26	2	1	1	47	25	1	1
1	58	20	0	0	1	44	18	1	2
1	58	15	1	6	1	38	16	2	2
1	58	12	0	4	1	38	7	1	0
1	56	14	0	1	1	31	10	1	0
1	55	22	2	2	1	27	8	1	1
1	55	20	2	2					
1	55	20	2	0					
1	55	16	4	0					
					Total	56	3182	978	59 89

T.R.

quake

quake in an horizontal direction, just below where the rafters<sup>s</sup> were inserted that support the roof, forty feet in length; and a summer-house made of bamboos, closely covered with shrubbery, which stood behind my house, was thrown down; besides which, no damage was found to have been done any where.

CHAP. XXI. — *Departure from Amboyna. — View of the Island Amblauw. — Of the Islands of St. Matthew. — Of the Toucan-bessis. — Of Cadoopan. — Of Bouton. — Of Caybyne and Lizard-island. — Of Saleyer. — Celebes. — Passage of the Budgeroons. — The Island Tanakeke. — View of the Tonyns, or Tunny Islands. — Of Great Solombo. — Of Madura. — Mandelique. — Anchorage off Japara. — Navigation along the Coast of Java. — Anchorage in the Road of Batavia. — Observations respecting the Navigation to Amboyna. — Great Inaccuracy of the Charts. — Strong Currents. — Calms.*

AFTER my ship had been unladen, and had taken in a new cargo, we left the road; we were the whole of that day and the following night in working down the bay, keeping always on the windward side, which was the shore of Leytimor, as, on entering, it had been that of Hitqe.

On the 9th of June, at sunrise, we were abreast of the Portuguese bay, and at ten o'clock A.M. we were out at sea.

At sunset we got sight of the island Amblauw, and on the next morning, of the island Bouro, abreast of us, to north-north-east.

On the 11th, in the evening, we saw the islands of St. Matthew, from the maintop, and lay-by during the night, on account of our vicinity to the Toucan-bessis.

In the morning of the next day we again pursued our course, but made but little sail, as the air was very thick, by the rain, and we had no good view, in order not to fall unexpectedly upon the Toucan-bessis; at seven o'clock, however, we suddenly saw them before us, about a league a-head; we instantly tacked and stood off, till the weather cleared up a little, and till, at eight o'clock, we could pursue our voyage again. We passed those dangerous islands, and had likewise a view of the island Cadoopan, where it is said that many cloves are produced; steering for the east point of Bouton, which we doubled about midnight.

On the 13th, at sunset, we saw the island Caybyne and Hagedissen, or Lizard-island; on the morning of the next day, the island Saleyer, and two hours afterwards the coast of Celebes, with the little islands the Budgeroons lying between them; at ten o'clock, A.M. we passed this narrow strait in safety, running between the southernmost and middlemost of the Budgeroons, at the distance of one-eighth of a league from the former.

In the afternoon we founded, for the first time, in thirty-four fathoms, stiff clay, being then abreast of Boela-comba, about three leagues off shore.

Sailing by the lead, during the night, along the coast of Celebes, we were, on the morning of the next day, by the island of Tanakeke; whence we steered our course so as to pass the Laars, or Boot, at a proper place. At noon we saw the Tonyns, or Tunny islands, and at sunset the islands of Salinas, bearing north, five leagues, founding continually with a line of twenty-five fathoms, without striking ground upon the Laars.

On the 16th we again struck soundings, which we afterwards kept.

On the 17th we got sight of the island Great Solombo, which we found to be of a moderate height, and placed too far south in the charts, by thirteen minutes, or three leagues .

leagues and a quarter. Hence we steered, in order to make the island Madura, of which we came in sight the next day at noon.

On the 20th, at sunrise, we passed Mandelique, and anchored at two o'clock, P.M. in the outer road of Japara, and sending our boat on shore for refreshments, we received a plentiful supply the next day from the worthy resident, Mr. Van der Beke; at the same time I received information that my ship, *Ouwerkerk*, was appointed, by the government of Batavia, to go a voyage to Surat.

In the afternoon we saw the point of Pamalang, and the lofty summit of Mount Tagal.

On the 23d, the hill of Cheribon was abreast, and the point of Indramaye nearly a-head of us; in the afternoon we saw the Boompjens islands; and in the evening we reckoned that we had passed the rock upon which the ship called the *Castle of Woerden* was lost.

The following day, in the morning, we saw the high trees of Sedary, and at sunset we came to an anchor off Murderer's Point, and in sight of the island Edam.

On the 25th, at eleven o'clock, A.M. we got under sail, and passing between the little islands of Leyden and Enkhuizen, we steered for the road of Batavia, where we cast anchor at three o'clock, P.M.

Before I go any farther, I think it necessary to say something respecting the navigation to Amboyna, as it is deserving of much attention, and has always been held a very dangerous voyage.

There are three circumstances which often unite to make it very hazardous, and are the chief causes of the difficulty and peril which are complained of:

First, the bad and inaccurate charts of this passage, which are made use of, and which are certainly extremely defective, notwithstanding the governor general, *Mossel*, alleges, in his further memorial, that at that time (the year 1753) the charts had been so improved, that, for two or three years before, none of the ships trading to the east had been lost. I am therefore not at all surprized that, before that time, ships were lost every year, if they were without any other aid than that of such deceitful guides. If I may judge from the charts which are thus pretended to be improved, and which are at present given to the ships that perform that voyage, they must undoubtedly have plunged many an intrepid seaman, who had not before ploughed these dangerous seas, into uncertainty and despair, and have driven him headlong into the midst of unknown and unavoidable dangers.

The first and chiefest requisite of a good sea-chart is, that in it the islands and coasts be accurately laid down in their proper latitudes; and all the charts from Java to Amboyna, are glaringly defective in this particular: one island is placed too far north, another too far south; and this is occasioned by the observations, whence these charts have been made, not being exact. This might be adduced as a disculpation of the hydrographer, were it not that the navigators of later times have constantly noted down, and pointed out these defects in the journals of their Amboyna voyages. My observations agreed with three of them, which I took with me for reference, when I went to Amboyna. Yet has not all this sufficed to produce the removal of this hurtful defect.

The second necessary requisite of a chart is, that the true direction of the coasts, and the exact positions of the islands, and their bearings with respect to the nearest land, be duly and accurately attended to. The defective state of the charts in question, in this particular too, is not a little complained of, and remains equally unrectified, although many reports have been made by navigators on the subject. And lastly,

that the respective distances be laid down as exactly as possible; which has, in these charts, been totally neglected; of which glaring defects I have from time to time made mention in my journal.

The second cause of the danger and difficulty of the eastern navigation are the currents, which set with so much violence between the islands and along the coasts of this archipelago, that if I had not experienced it myself, I should scarcely credit the account: in addition to this, they have no regular course, and sometimes run contrary to the wind, and at uncertain times.

Add to these, as a third cause, the calms which prevail so much in these climates, and the dangers which surround navigators in this passage will be very manifest; for vessels are driven, in dead calm weather, by the violent currents, upon unknown shoals and rocks, so that the most experienced seaman is unable, in such cases, to save the ship and cargo entrusted to him.

It has likewise been observed, that such of the Company's captains as have performed several voyages to the eastern provinces are, for this reason, continued in that navigation, which is not disadvantageous for the interest of the Company, but unfortunate for those captains, as these voyages afford but little profit, and they do not, in consequence, feel much attachment for the service of the Company.

# PIGAFETTA'S VOYAGE ROUND THE WORLD.

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## THE FIRST VOYAGE ROUND THE WORLD,

Effected in the Years 1519, 1520, 1521, and 1522,

By the Chevalier PIGAFETTA, on board the Squadron of MAGELLAN;

WITH

An Extract from the TREATISE ON NAVIGATION, by the same Author; some OBSERVATIONS on the Chevalier MARTIN BEHAIM, and a DESCRIPTION of his TERRESTRIAL GLOBE. Paris, An IX. (1800.)

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## INTRODUCTION,

By the *French Translator*, the *Editor* of the Edition in modern Italian.

I. **I**N the fifteenth century the Italians possessed, almost exclusively, the trade in those articles which Asia furnishes to Europe, especially spices; that is to say, pepper, cinnamon, cloves, ginger, nutmegs, &c. vegetable productions, formerly as now in constant demand, less on account of their agreeable flavour than their intrinsic virtues. These aromatics were brought from some islands near the equator, either by the inhabitants of those islands themselves, or by their neighbours, to that part of India intermediate between the place of growth and Europe, whither the European merchants went to purchase them\*. Before the Arabs overran and laid Egypt waste, commerce with India was carried on by the way of the Red Sea, as in the time of the Phœnicians. From the shores of this sea the merchandize was transported on the backs of camels to the Nile, after vain attempts to form navigable canals between that river and the Red Sea. Down the Nile these goods were carried in boats to the ports of Egypt, where they were laden on vessels belonging to Venice, to Genoa, Amalfi, and Pisa. But, when the Arabs, whether in consequence of religious motives, the policy of despotism, or that anarchy always favourable to pirates, drove commerce from its channel by the gulf of Arabia, the merchants of India resorted to the Persian Gulf and

\* The Europeans were not accustomed, at the period adverted to, to fetch the spices in which they traded from any part of India: from that country, either by the Indians themselves, or by Persian merchants who went to India for the purpose, these valuable commodities were transported on the backs of camels to the Caspian Sea, and were there put on board vessels, navigated indifferently by Indians or Persians, to be landed, part at the mouth of the Kur, whence overland they were conveyed to the Black Sea, and there received by the Genoese and Venetians established in the Crimea; and part at Astracan, whence by the merchants of Novogorod they were conveyed overland to the Baltic, and afterwards distributed over Europe by the members of the Hanseatic league connected with the merchants of Novogorod. *ENG. TR.*

Indian Sea, whence, by the Euphrates, and by the Indus and Oxus, the productions of India were conveyed to the Caspian, or the Black Sea, and thence into the Mediterranean, whither the Italians went to purchase and transport them to all the shores of Europe, and even to the interior of the continent as far as to the frozen regions of Muscovy and Norway where they had their factories \*.

II. It will readily be inferred that the price of these commodities at first hand, compared with the price at which they were ultimately retailed, must have been very low; the cost to the consumer being necessarily much enhanced by the charge of transport and the great risks run, whether in navigating the Red Sea, or in passing the deserts; to which must be added the profit exacted by the different individuals through whose hands they passed. We are informed by one Barthelemi, a Florentine merchant, who, towards the close of the fifteenth century, had resided the space of four-and-twenty years in India †, that they passed through twelve different hands before they reached the consumer, and that the ultimate price of them was increased tenfold from the first cost ‡; this great increase however was much assisted by monopoly. When the anti-social Arabs had perfectly annihilated the commerce of the Red Sea, the Genoese combined with the schismatic Emperor of Constantinople in establishing an exclusive commerce by the way of the Black Sea, by Tatar [Samarcand], and Persia; and when the Sultan of Egypt, after subduing the Arabs, re-opened to trade the channel by the Nile, his allies the Venetians supplanted the Genoese, and exclusively supplied the nations of Europe with the rich merchandize of India §. Finally, by one means or other, the Italians so perfectly engrossed the trade with India, as to render all other nations of Europe their tributaries; and the price for spices, towards the middle of the sixteenth century, from another circumstance, became farther enhanced: at this epoch the Moors rendered themselves masters of the islands which almost exclusively produce the valuable spices; and, better acquainted with the value they bore in Europe than were the natives, would no longer part with them without an increase of price ¶.

### III. The

\* This is an error, the distributors of the commodities of India to the north of Europe, (as may be seen in Tooke's View of the Russian Empire, in Coxe's Northern Tour, in Guthrie's Travels to the Crimea, and in Pallas's Southern Tour,) at the period of the establishment of the Venetians at Constantinople, and of the Genoese at Cassa, as is observed in the preceding note, were the merchants of Novogord, connected with the Hanseatic league. Their predecessors in this lucrative commerce were the Golden Horde, and theirs again the Permians, inhabitants of the country west of the Ural mountains; these people, even earlier than the days of the great Alfred, maintained a profitable intercourse with India. ENG. TR.

† Rather, perhaps, in Turkey, as Benedetto Dei in his chronicle, (extracts of which are before the writer,) on noticing the different states with whom the Florentines traded direct at this time, does not mention India. Benedetto Dei was contemporary with Barthelemi, had been deputed representative of the state of Florence to the Sultan Ottoman, and in his chronicle throws great light on the trade of Florence as well as of Venice at this period, a period so disastrous to the Venetians, and at which Florence shone with its greatest splendor. ENG. TR. from Della Decima e delle altre gravizze, della monita, e della mercatura degli Fiorentini, tomo secondo, Lisbona e Lucca, 1765.

‡ This also is corroborated by the remarks on the map of the world of Behaim, of which I shall speak in the twelfth paragraph. FRENCH TR.

§ Again, this is not perfectly the fact; at the period alluded to, the Genoese continued to compete with the Venetians, as did the Florentines by means of the port of Pisa. The treaty made die 6 mensis Moharra, anno Egira 894 (an. Chr. 1474-5) between the Florentine nation, by means of their ambassador Luigi di M. Agnolo della Stufa, and the Sultan of Egypt Kassim Aboo Eloozar, the Florentines were admitted to trade with Egypt, equally with the Venetians, had protection assured to such as chose to reside in the country, and were secured in their rights and privileges in not only the same, but even a more ample degree than the Venetians. ENG. TR. from Della Decima, &c. before quoted, tomo secondo, p. 213.

¶ Fifteenth it should be.

¶ Historians relate the fact of the invasion of the Moluccas by the Moors; and our author himself adverts to the circumstance in the following words, which are literally copied from the manuscript that the

III. The love of gain, and a disposition to lessen the difficulties and expences incident on the traffic with India, originated schemes for obtaining its merchandize directly from the first hand; these schemes were planned at the epoch of the regeneration of literature, that at which the art of printing, newly discovered, had already diffused through a greater number of hands the knowledge transmitted to posterity by ancient writers on navigation and the figure of the earth. It became known that certain Phœnician navigators, sailing from the Red Sea, entered the Mediterranean by the Strait of Gibraltar\*; it consequently was conjectured, it would be possible to sail from the Atlantic to the mouth of the Red Sea, and, by pursuing an eastern course, to reach the Spice Islands. Moreover, it ceased any longer to be doubted that the ancients were acquainted with the spherical form of the earth, and the existence of our antipodes, an opinion which, in the age of ignorance, was not only considered to be antiphilosophical, but also a heresy. Travellers who, treading in the steps of the Venetian Marco Polo, had traced all the sea-coast of Asia, affirmed that the earth described a curve from east to west; and the Portuguese who, in the beginning of the fifteenth century, had visited all the shores of Guinea, by uniting their information to that of the navigators of the north of Europe, made evident, from their account of the elevation and depression of the polar star, that the earth, from north to south, in a similar manner was marked by a curve. From these two data it consequently followed that the earth was of a spherical form, and that it would be possible to make the circuit of it. The deduction corresponded well with the observations of astrologers, who, notwithstanding the ridiculous object by which they were actuated in their observations, that of divining the future, had yet much advanced the science of astronomy. Narratives also were current, though of a vague description, of certain sailors said to have been transported to the islands between Europe and America, and thence to the new continent then unknown. On these grounds were built the hope of reaching Malucho (the name then given to the Spice Islands, now termed the Maluccas,) either by coasting along the shores of Africa and afterwards steering east, or by keeping a western course across the Atlantic Ocean. So little obstacle was expected to this latter course, that the most celebrated geographers, in their charts, placed only a few islands between the western shores of Europe and Africa and the eastern coast of Asia, as will be seen in paragraph XII. This was indeed an error, but an error very excusable in the geographers of that time; for, though the ancients had pretty correctly ascertained the circumference of the earth†, and had even laid down certain rules to determine the longitude of places,

reader may be qualified to judge of the style of Pigafetta; and for the same reason as often as occasion may present itself to quote his words the same plan will be followed. The words of Pigafetta are, *Sono forsi cinquanta anni, che questi mori abitano in Ma'lucho: prima li habitano gentili*: p. 203. "The Moors have inhabited Molucca about fifty years; before them it was peopled by Pagans."

\* Herodotus, l. iv. c. 4; Strabo, l. i.; and others enumerated by Riccioli Geogr. l. iii. c. 20. FRENCH TR.

† Aristotle (de Cœlo, lib. ii.) speaks of it as an established fact. It appears that the mathematicians of Egypt measured a degree in the latitude of Memphis, that is to say in thirty degrees north, upon their determining on the position and size of the pyramids; for each of the sides of the largest pyramid is  $\frac{1}{3}$ th part of a degree in length, whence it may be fair to conjecture, that they divided the degree into a thousand parts, and gave to each side of the pyramid the length of  $\frac{2}{3}$ th parts of a degree. (Venini Delle Misure Francese. Opusc. Sulti, tom. xx. p. 98.) FRENCH TR.

A degree in latitude thirty degrees measures 363,724 English feet, according to the tables of Professor Pond. The 500th part of a degree is consequently 727½ English feet. Now, as will be seen in the notes to the relation respecting Egypt of Abd Allatif, in that portion of this work which comprizes the Travels in Africa,



places, for want of these rules being thoroughly comprehended they were but little regarded. To the general ignorance at this time therefore of the dimensions of the earth, and of the longitude of places, is to be ascribed the expectation of reaching in a short time, by a western course, those islands, the distance of which from Europe was only known towards the east and the south.

IV. The mind of Christopher Colon was wholly occupied by reflection on this matter; this great man, who combined with a theoretic and practical knowledge of navigation all the information that could be gathered from preceding navigators, and the intrepidity requisite for a grand enterprize, this great man, convinced of the spherical form of the earth, saw no difficulty in crossing the Atlantic Ocean by means of the compass, with the variation of which, and with the means of correcting it he was acquainted \*. He applied to the Genoese, who had no other means of reviving their commerce, for ships and means of putting his plan into execution; but the Genoese, occupied on trivial speculations, and perpetually embroiled by domestic factions, which rendered them now subject to the Kings of France, and at other times to the Dukes of Milan, refused him assistance. To the King of Portugal he next made application, but ineffectually, as, intent on reaching the Moluccas by doubling the southern cape of Africa, his proposition was not regarded by this monarch; at length, after long and repeated memorials, the court of Spain resolved on trusting him with some ships. Still Colon merely touched at the islands of America (the discovery of that continent being reserved for his successors), and flattered himself in vain with finding a passage to the west of Mexico, and by the isthmus of Panama.

V. The voyage of Colon engendered disputes between the Spaniards and Portuguese respecting certain islands discovered by them, and still more respecting the lands which they hoped to discover in future. The latter, on undertaking their voyages along the coast of Africa, had the foresight to avail themselves of the general opinion of the time, that the successor of St. Peter, as the vicar of Jesus Christ, had the power of disposing of such kingdoms as did not pertain to Christian potentates. The Popes, Martin V. Eugenius IV. and Nicholas V. had already invested Portugal with the empire of all the countries they had hitherto discovered on the coast of Africa. Alexander VI. to whom, after the voyage of Colon, Spain and Portugal preferred at the same instant their different pretensions, marked out a line which traversing the two poles, divided the terrestrial globe. The island Ferro, one of the Canaries, through which passed the first meridian of Ptolemy, was the point through which this line, called the Line of Demarcation, ran to either pole. From this line all eastward was granted by the Pope to the Portuguese, to the Spaniards all they should discover west. But when the

Africa, the sides of the great pyramid, according to the French geometricians, measure at present 716 French feet 6 inches, or 764½ English feet, without the casing of marble with which it was formerly covered; with that casing it is computed to have measured 734 French feet 6 inches, or 782½ English feet. Now, taking the latter measurement, the proportion of the side of the great pyramid to a degree in latitude thirty degrees will be nearly as 1 to 464, and not as 1 to 500. ENG. TR.

It is moreover known that Hypparchus, three centuries before the vulgar æra had determined the latitude and longitude of several stars; and that Ptolemy in the second century ascertained by his method the geographical position of several places on the earth with a nicety from which we may infer that they were the result of astronomical observations. *Robertson. An Historical Disquisition respecting Ancient India. Sect. II. FRENCH. TR.*

\* Teraboschi. *Storia delle Lettere Ital.* Tomo vi. However, the knowledge of the variation of the needle must at this time have been far from generally diffused, since it was unknown to the pilots of the squadron of Magellan. (See forward Book II.)

Portuguese made themselves masters of the Brazils, and insisted on comprehending this country within the east of the line, the line of demarcation was extended thirty degrees westward from the first meridian of Ptolemy.

VI. While Spain in the west was extending her conquests, and her chiefs multiplying their cruelties and crimes, the Portuguese, under Vasco de Gama, in 1497, doubled the Cape of Good Hope\*, discovered in 1455 by Cadamosto a Venetian navigator. They coasted along the eastern shores of Africa and the islands which lie between that portion of the world and Asia, and arrived at Calicut, which then was the mart for spices. After wars and battles, as well with the natives as with the Moors, who had invaded a considerable portion of this country, they extended their voyage to the Molucca islands; and here, in 1510, they formed an establishment, and engrossed almost an exclusive traffic in pepper and cloves, spices chiefly exported from these islands†.

VII. The duke of Albuquerque was at this time governor and viceroy of the Portuguese establishments in India, and by his genius and intrepidity had rendered abortive the machinations of the Venetians, who, being at that time the allies of Soliman the Magnificent, exerted all their means to preserve in its channel, by the Red Sea, the commerce which the Portuguese were anxious to transport to Lisbon‡. In the suite of this viceroy it was that Magellan remained five years in India§. He was a Portuguese gentleman, had cultivated the sciences, but especially those branches which relate to navigation (a study then much in vogue among the nobility of Portugal), and had undertaken this voyage that he might make himself known at court, and secure to himself an employment suited to his genius. From Calicut he went to Sumatra, where he captured a slave. It does not appear that he extended his voyage to the Moluccas, notwithstanding the assertions of Angera, Ramusio, and other writers||; for if he had proceeded to them he would have known that they are under the equinoctial line, and consequently would not have gone in search of them to the fourteenth degree of north latitude, as he is seen to have done in his chart. From the Indies he returned to Lisbon. In the mean time Albuquerque sent to the Moluccas Francis Serano, a friend and relation of Magellan, with directions to construct a fort there; but this he was unable to effect, as, from an insatiate pride, each of the kings of the islands contended for its being built on his own territory; and as Serano himself, anxious to subdue them all at once, acted rather as a sovereign than a peace-maker, which title he assumed. In course of the work will be seen in what manner he became the victim of his ambition.

VIII. I am ignorant what pretensions Magellan may have had to favours from court; but his whole conduct seems to shew that he was equally intrepid and well informed, notwithstanding the assertions of the Jesuit Maffei¶, who charges him with possessing a

\* This cape was laid down in 1450 by Brother Mauro, camaldule of the convent of Murano near Venice, on a map of the world which I saw in 1790, and which, as is said, is still there to be seen. FRENCH TR.

† At least if credit be due to our author, who, at page 176, states his having met, in 1521, with Pedro de Lorosa, and learnt from him, *Come ja sedizi anni stava ne la India, ma x in Malucho, e tanti erano che Malucho stava scoperto riscosamente*. "That he had then been sixteen years in India, but ten in the Moluccas, as long back as which they had been discovered, though the discovery had been kept secret." FRENCH TR.

‡ Robertson. Loco citato, sect. iv.

§ Petri Anglerii, Opus Epist. Epist. 767.

|| Histoire Generale de Voyages, tom. i. p. 126. Edit, de Paris.

¶ Hist. Rer. Ind. lib. viii.

larger share of vanity than of real merit; though, if our author be believed, we must allow his claims to have been exceedingly moderate, since they were limited to an increase of pay of nearly six francs (five shillings) per month. As, moreover, the King of Spain invested him with the order of St. James of the Sword, and entrusted him with the command of a Squadron, there is reason to believe that, in the services rendered by him to Portugal, he had exhibited evident proof of valour and skill.

IX. During the stay of Magellan in Portugal, as Maffei relates \*, he kept up a constant correspondence with his friend Serano, who invited him to return to India, and even to repair to the Moluccas, the distance of which islands from Sumatra, an island well known to him, he pointed out. But if conjecture be allowed, and the tracing of causes from results, it is not unlikely that Magellan will have complained to Serano of the injustice of the court of Lisbon towards him; that Serano, possibly menaced by the viceroy for not having followed his orders in building the fort, will have offered to surrender these islands to Spain; and at the same time have given information to Magellan, acquired from the inhabitants of the most eastern islands, of the possibility of falling in with the cape of the continent discovered by Colon, of doubling it, or of finding some strait in that direction; and this the more from the Portuguese being at that time in possession of the Brazils, discovered in 1500 by Cabral, a country in which John Carvajo, of whom Pigafetta frequently speaks, had resided for four years, and in which John de Solis, while seeking a passage to the Indies, was assassinated and devoured by cannibals, together with sixty of his crew.

X. It is not altogether improbable that Magellan was enabled by these means to obtain some intelligence respecting a passage from the Atlantic to the Indian Ocean; but it was by other modes that he became satisfied of the actual existence of this passage, as he informed Pigafetta and the companions of his expedition when he found himself in the strait. While soliciting advancement at the court of Lisbon, he paid such close attention to the study of geography and navigation as to render himself one of the best geographers and navigators of his time †. In consequence of this character he was allowed to examine all the charts which had hitherto been collected, and which were preserved with great care in the royal treasury. The infant Don Henry, who first planned the undertaking of voyages for the discovery of new countries, and those who succeeded him, had here collected all the speculations on this subject, and all the geographical maps they could obtain, by means of those geographers, navigators, and astronomers who, in hopes of reward, came to tender their works at Lisbon. In this treasury it was that Magellan found a chart of Martin of Bohemia, on which the strait was marked which communicates with the Atlantic and Pacific Ocean.

XI. In order to be convinced that Magellan really sought this passage in consequence of seeing it marked on the chart of Martin of Bohemia, one need only read what Pigafetta says on this subject, whose words are here exactly copied from the manuscript in our possession ‡. It is singular this fact should be denied, as it might have been found in the extract from Pigafetta, published in French by Fabre, and in Italian by Ramusio; but it is still more singular that this fact, so honourable for Martin of Bohemia, or

\* Hist. Rer. Ind. lib. viii.

† *Egli più giustamente che homo fossi al mondo carteava, et navigava.* "He drew charts and navigated with more exactitude than any one living."

‡ *Il capitano-generale, che suprema de dover fare la sua navigazione per uno stretto molto ascoso, como vite ne la thesoraria del re de Portugal in una carta fata per quello eccellentissimo-buomo Martin de Boemia, mando due navi, &c.* Page 40. "The captain-general, who knew he had to navigate through a very secret strait, which he had seen, in the treasury of the King of Portugal, marked in a chart drawn up by that most excellent man Martin de Boemia, ordered two ships," &c.

rather Behaim \*, should have been denied by Mr. de Mur, on publishing a work in honour of him †. An examination into this disputed point, materially connected as it is with the most interesting part of the voyage I am about to publish, will not here be misplaced. M. Otto, in a memoir inserted in the second volume of the *Philosophical Transactions* of the Society of Philadelphia, has sought to prove that Colon was not the first who discovered America, nor Magellan the first explorer of the strait which bears his name; and that the honour of both these discoveries is peculiarly due to Martin Behaim of Nuremberg. In fact, this Martin Behaim was one of the first geographers of his age; and one of the first who, in 1492, formed a map of the world, which he bequeathed to his country, and in which it is yet preserved; was one of the first who crossed the line with the famous navigator Jaques Cano in 1482; who, having married the daughter of Huertter, a feudatory of the island of Fayal, one of the Azores, passed several years on that island, occasionally at different times making voyages to Europe; and who, esteemed and consulted by the learned men of his time, as well as by the court of Lisbon, had ample means of acquiring the most rare, as well as, for that age, the most extensive information with respect to what relates to geography. Still there is no foundation for pretending that Colon discovered America posteriorly to Behaim, as was clearly demonstrated by the president Count Carli, lost to the republic of letters and Milan, in 1795 ‡. M. Otto rests his opinion on a chronicle of Nuremberg, which states that “he discovered the islands of America before Colon, and the strait, which afterwards was called the Magellanic, even before Magellan himself;” and on the testimony of Hartman Schedel, who says, that Magellan and Cano in course of their sailing found themselves in another world. But the president Carli observes that the chronicle of Nuremberg is not contemporary; and Mr. de Murr convinced himself that the statement ascribed to Schedel is interpolated in the manuscript in different hand-writing. In fact it is not found in the first edition of his work, which is in our library. Add to this, the expression, “*In alterum orbem accepti sunt*,” may indicate their having passed the line.

XII. With still less reason does Mr. Murr assume that Martin Behaim never had the least idea of the Strait of Magellan. “Having had the means,” says Mr. Murr, “of examining the archives of his heirs, I found among them no trace of this discovery. Moreover, the terrestrial globe which he presented to the city of Nuremberg sufficiently proves that Martin Behaim did not even suspect the existence of America.” This globe, the hemisphere of which, comprising the western part of Europe and Africa and the eastern part of Asia, was published by Mr. Murr, this globe, I say, shews, that at that time it was conceived a vessel might proceed directly from the Azores to the kingdoms of Tungut, Cambalu, and Thibet, without meeting with any other land than the island of Cathay, in the whole extent of ocean to be crossed in the voyage. From the Canary islands likewise it was imagined a course was open to the island Antilia, and on this account Colon gave the name of Antilles to the islands in front of America. From the Cape Verd islands, on the globe of Behaim, the course was described as open and with no land intervening to Cipangu (Japan), made known to Europe by Marco Polo, and mentioned by Pigafetta, who fancied he passed at but a short distance from

\* It is well known that his real name was Behaim. Cluverius says he was called of Bohemia because his ancestors came originally from that country, or had settled there for the purpose of carrying on traffic.

† Notice sur le Chevalier Martin Behaim, celebre navigateur Portugais; avec la description de son globe terrestre. See the Dissertation at the close of this work.

‡ See *Opuscoli Scelti di Milano*, tomo xv. p. 72.

it. From Japan the sea was open to Cambaya, and, turning southward, to the larger and smaller islands of Java, placed under the same meridian. It is therefore plain that the globe alluded to does not notice America. As therefore Behaim in 1492, knew nothing of America, he could impart no information to Colon, who failed in that year; but this fact by no means proves that, between that epoch and the year 1506, which was the last of the life of Behaim, he had not become acquainted with all that was known up to that time, and marked the same on a geographical chart. His different voyages, his extensive correspondence with all the learned men of the day, his various occupations at the court of Lisbon, and, above all, his residence at the Azores islands, furnished him with means of acquiring all the information which chance or research had produced among navigators. Varenus\* pretends that Nunez de Valboa, in 1513, was convinced of the existence of the strait in question from currents, which are only found in channels open at the two extremities, and never in a bay. Why in this case should it be deemed unlikely that some other navigators should have made the same observation in the time of Behaim, and have communicated it to him? Mr. de Murr indeed allows the possibility of such an incident, but pretends that it did not take place; and that it was Marc-Antonio Pigafetta, who in his Itinerary, published in London in 1585, first spread the fable of the discovery of America by Behaim; "and I am ignorant," adds he, "whether Philip Pigafetta, in his Relation respecting Congo, does or not allude to Martin Behaim." We may gather from the manner in which Mr. de Murr expresses himself, that he scarcely knew the names and titles of the books of the two other Pigafettas (Marc-Antonio and Philip); and that he was altogether uninformed respecting our knight Antonio Pigafetta, of his "Relation of the Discovery of India;" or of the extracts published from that work; nay, that he had not himself read the Itinerary of which he speaks, for it contains no mention whatever of Martin Behaim. Neither does Philip Pigafetta, in his Relation respecting Congo, printed at Rome in 1591, or in his Itinerary of Egypt, make any mention of him, as I learn in the latter instance from my friend Mr. Malacarne, professor of surgery, in whose possession this manuscript is. There is therefore little room to doubt that Magellan had seen the strait to which he gave name marked on the chart of Martin Behaim: but it must at the same time be allowed either that he placed no implicit reliance on the chart, or that the chart in question was very incorrect; as otherwise, when in latitude forty-nine degrees thirty minutes north, he would not have dispatched his vessel the San Jago to reconnoitre the coast on which it was shipwrecked while seeking the strait in fifty-two degrees; nor would he have determined on proceeding south as high as seventy-five degrees in case he should not find it.

XIII. Let us now return to the history of Magellan, and of our author. Whether in view of avenging his fancied wrongs, whether to obtain that promotion he sought, Magellan repaired to Spain, and offered his services to Charles V. in taking command of a squadron to sail to the westward of the line of demarcation as far as to the Spice-islands, which were better known from the report of the Italians, who had proceeded thither eastward, than from the narratives of the Portuguese, who had then been ten years established there, but who kept in greatest secrecy the discoveries they made; so much so indeed, says Castagnada, that in the course of time the memory of the voyage of Gama would have been lost, had he not himself taken the trouble of writing and committing it to the press†. Charles V., or rather Cardinal Ximenes, his prime

\* Geog. gener. c. 12.

† Historia della conquista delle Indie Orientale, preface.

minister, who governed Spain during his absence, paid great attention to the project of Magellan, who not only convinced him of the possibility of reaching the Spice-Islands by sailing towards the west, but assured him that they were comprised within that portion of the globe which, in virtue of the line of demarcation, belonged to Spain; for, had it not been for this representation, the Cardinal would assuredly not have sanctioned the invasion of a country vested in another by the Pope. In order to satisfy him that the Moluccas were in the Spanish hemisphere, Magellan brought forward the testimony not only of Cristoval Hara, who stated that he was convinced from the information given him by factors belonging to different establishments he had in India of the real geographical position of these islands\*, but also of the famous astrologer Rodrigo Faleiro, who shewed, by a map of the world and by the compasses, that these islands were situate within the one hundred and eightieth degree of longitude west. And as the Cardinal continued yet to entertain some doubt of the fact, Faleiro instructed Magellan in a method to calculate the longitude, so as not to overpass the line† of demarcation. In order to clear the point, it was indeed proposed that Faleiro should accompany Magellan; but, as the former was an astrologer, he excused himself from being a party in the voyage, pretending he had computed it, and found, if attempted, it would prove fatal to him. It did indeed prove fatal to Martin de Sevilla, who went in his stead, but who had not foreseen that he would be assassinated, as will be seen he was at the island Zubu.

XIV. We have a proof of the importance of inquiries into the longitudes, during this voyage, in the description I am about to publish. Scarcely had the squadron reached the Pacific Ocean ere the Cavellero Pigafetta made a point of noting on his journal, not only the latitude, but also the longitude of the line of demarcation; and in order to obviate any misconception, he remarks that this line is thirty degrees west of the first meridian, which itself is three degrees west of Cape Verd‡. After having expressed himself with such exactitude, it is highly surprizing that Fabre, who has given an extract of his narrative, should not have comprehended him, and instead of degrees of longitude "from the line of demarcation," have constantly written "from the line of departure," or "the degree of longitude whence they departed;" and in that part where he should have marked the position of the line, the same as our author has done, he says, "and thirty degrees from the meridian, which is three degrees more towards the east than the Cape of Good Hope." It is evident his mode of expression is marked by a want of sense, and in consequence Ramusio, on translating the work of Fabre, has wholly omitted this passage; that in copying the author before him, in lieu of "Longitudine dalla linea di divisione," he should have given "Longitudine dal luogo donde si eran partiti," is certainly excusable; but by thus writing he encreases the errors of the longitude noticed by Pigafetta by forty degrees.

XV. But the Portuguese, interested in determining the real latitude of the Moluccas, accused the Spaniards not only of being in error, but with perfidy; and Pietro Martir D'Angera, a Milanese gentleman, and historiographer of the court of Spain, pleasantly states in one of his letters §, that twenty-four pilots and astronomers were chosen, Spanish and Portuguese, who, after numerous syllogisms, at length decided

\* Epistola di Massimiliano Transilvano, presso Ramusio, tom i. p. 348.

† Castagnede, loc cit.

‡ La linea de la repartitione e trenta gradi longi dal meridionale; el meridionale e tre gradi al levante longi da Capo Verde, page 56.

§ Epistle 797.



that the question could no otherwise be settled than by the mouths of cannon; Charles V. however, computed that it would be preferable he should accept the offer made him by John III. of Portugal of one hundred and fifty thousand pistoles in lieu of all claim; and he consequently ceded his pretensions. It is moreover clear that these islands, placed by Pigafetta between the one hundred and sixtieth and one hundred and seventieth degree west of the line of demarcation, are in reality situate beyond one hundred and eighty degrees west of that line, and that they of course, by the bull of Alexander VI., belonged to Portugal. Putting out of question their exact position, the King of Spain, satisfied that Portugal usurped a property inherent in himself, and already disposed to grant a squadron of caravellas \* to Estefano Gomez for a voyage of discovery, confided the command of it to Magellan, who, in order to remove all obstacles, entrusted one of the vessels to the pilotage of the same Gomez, a confidence which he soon had reason to repent.

XVI. While this matter was in agitation at the court of Madrid, Antonio Pigafetta, a gentleman of Vicenza, was at Rome, whither all Italians of genius, or who sought to make their fortunes repaired, especially in the brilliant æra of Leo X. He was of a tolerably noble family, originally from Tuscany, and probably was the son of that Matteo Pigafetta, a doctor and knight, who at several epochs was employed in the ministry of the affairs of his country †. Alike anxious for fame and fortune, he felt inclined to seek both in distant countries, and even in the new world recently discovered by Colon and Americo Vespucci, and in which a number of Italians had already acquired wealth and renown. He went to Spain in the suite of Signor Francesco Chiericuto, his fellow citizen, who was deputed from Rome as orator or ambassador to Charles V. in order thence to commence his travels. Every thing succeeded with him to the full extent of his wishes; and in the epistle in which he dedicates his work will be seen the manner in which he obtained permission from the Emperor to accompany the squadron of Magellan.

XVII. Pigafetta certainly was not very well informed, notwithstanding the assertion of Marzari, a Vicentine historian, "that he was famous throughout Europe for his skill in philosophy, in the mathematics, and astrology ‡; but he had studied geography

\* Caravella was a term given by the Portuguese, at this time, to vessels which carried on the trade with India, and is a diminutive of caravan. The spices and silks of India, as before has been noticed, were formerly conveyed by camels, over-land, from Samarcand, the Gulf of Bassora, or the Red Sea. For security's sake the merchants travelled in large bodies, denominated caravans: as therefore the word caravan was applied to the assemblage which brought Indian commodities to the hands of Europeans, the ships employed on a similar object, appropriately received the distinction Caravellas. ENB. TR.

† Angel Gabrieli de Sta. Maria, Biblioteca e Storia de' scrittori Vicentini, vol. iv. p. 1. — I have made some enquiries at Vicenza respecting the person and family of our traveller, but have been able to obtain but little information. In a manuscript entitled Genealogica Storia delle famiglie nobile Vicentini, vol. ii. it is said he was the son of Domitio qm. Antonio and Bartolomea Marostica; and that he was elected Jurisconsultus in 1470, which ill accords with the Cavallero Antonio, unless indeed his father was the Jurisconsultus. For what regards the Cavallero Antonio, there are only two lines of an epitaph placed in the church of the nuns of St. Dominic by the Cavallero Capra, who inherited the estate of Philip Pigafetta. "Philippus Pigafetta—Perigrinandi cupidus; et Antonii gentilis sui eq. hierosolim, qui primus terrarum orbem circumiit, gloriæ æmulus, abditissimas regiones adivit;" etc. His house is still visible at Vicenza in the street Della-Luna; it is of Gothic architecture, and was built by his family in 1481; but on his return he caused the portal to be ornamented by a festoon of roses, and engraved thereon the following words IL N'EST ROSE SANS ESPINE; having no doubt in view the glory he had acquired by his circumnavigation, and the sufferings he had undergone. I owe these particulars to the Condes Francesi di Thieni, and Francesi di San Giovanni, to whom I feel it equally a duty and a pleasure thus publicly to acknowledge my obligation. FR. TR.

‡ Storia di Vicenza, al' anno 1480.



and astronomy sufficiently to comprehend the use of the astrolabe, and determine the latitude of a place; he was likewise acquainted with the theory of celestial phenomena sufficiently well to make those observations of the stars by which the variations of the needle are ascertained, the run of a ship is computed, and the longitude found. His knowledge in these appendages on the art of navigation will be seen in his *Treatise on Navigation*, of which an extract is given at the conclusion of the narrative of his voyage.

XVIII. His anxiety to obtain further knowledge equalled and even surpassed his acquirements. Of this we have a specimen in the studious attention he paid, during his voyage, to the acquisition of the idioms of the different nations he visited, and to forming vocabularies of less or greater volume, as circumstances admitted. He sought to be an eye-witness of every thing himself, and had frequent means of gratifying his wishes in this respect, owing to the private missions in which he was sent to the Kings of the islands visited by the Squadron. We shall in the course of his narrative perceive, that he scarcely ever failed of making excursions for the purpose of examining the most important branches of culture of the different countries; the natural history of these he gives in the best manner in his power; not, indeed, with the exactitude of a botanist, but with the precision of a man of sense. Not contenting himself with what he saw, he sought for information respecting those countries at which the Squadron did not touch, by means of those Indians who, of their own accord or by compulsion, were on board the Squadron. It must, at the same time, be allowed, that he was deficient of the requisite knowledge of natural history and physics to be qualified to appreciate duly all he saw, and to distinguish truth amid the fables and futilities related to him; of the inhabitants of the Orellana, for example, and the Amazons, of Pygmies, &c. descriptions of whom, given as if he seriously credited them himself, excites one's risible faculties.

XIX. But though he was not either a skilful botanist, naturalist, or astronomer, as are most of the navigators of the present age, Pigafetta is far from meriting the obloquy thrown on him by M. de Paw, who calls him "a barbarous exaggerator, a credulous and ignorant man, who, with no duty, and with no appointment, failed in the Victory \*." But again, what value is assignable to the obloquy of M. Paw? Does it ask more than a cursory view of his "*Recherches sur les Americains*," to be satisfied that he is a writer who, by "hazardous assertions, taking them in the most favourable light, and without understanding what he speaks about," as M. Pernetty justly observes †, proposed to himself no other object than of writing a book which might be palatable to the self-titled philosophers of the day, either by the novelty of the delusive system it broaches respecting America, or by its scandal, and the irreligious sentiments it contains. Indeed, this author was unacquainted with any other than the wretched extract of the work of Pigafetta, published by Fabre; yet does he presume to condemn both the writer and the work itself, as if he had seen it in its perfect state. It is true, on the other hand, other writers, among which is to be ranked the celebrated Tiraboschi, thought little of the Voyage of Pigafetta; but this could only arise from their having conceived that he wrote nothing but what they had seen in Fabre and Ramusio.

XX. Pigafetta, moreover, is specially deserving of praise for the care he has shewn in noting daily all he saw and heard, and all that occurred to himself and

\* *Recherches sur les Americains*, tome i. p. 289.

† *Preface a la Dissertation sur les Recherches*.

his companions in the squadron; he was furthermore so fortunate as never to have been out of condition to write; for, while almost the whole of the crew were groaning under tedious maladies, he uninterruptedly enjoyed his health in sufficient degree to be qualified to make his daily observations; hence, when on his return he reached the islands of Cape Verd, and enquired the day of the week, he could not be persuaded that he had lost a day, owing to his having regularly kept his journal. Pigafetta is not the only one who has felt surprize on making the tour of the globe, at having lost a day; this loss, which was undoubted, seemed at that time so inexplicable, says Angera \*, that it was rather believed that our navigators had not made the tour of the world, until the astronomers and Cardinal Contarini demonstrated that such a loss was a natural consequence which must happen to all who should circumnavigate the globe, sailing from east to west.

XXI. At the close of three years, says Angera †, of two hundred and thirty-seven persons, of whom the equipment consisted at its outfit, and of the five vessels of which the squadron consisted, but eighteen men and but one vessel, in a shattered and leaky condition, returned to Seville, the place from which they sailed; of these eighteen was Pigafetta. Every one on board the remaining ship made a point of relating all that had occurred, and this the more from the disposition of the court of Spain to publish the account of a voyage so truly important; for before these no one had circumnavigated the globe. Pietro Martyr D'Angera, whom we have recently quoted, a member of the council for India affairs, and who had already written an account of the Voyage of Colon ‡, was entrusted to collect all that could be obtained from the wretched remains of the crews. Into his hands probably will have been delivered all the journals which had been preserved on board the vessel that returned; but it seems, Pigafetta retained that which he had kept, for he himself informs us that he went to Valladolid, to present himself before the Emperor §; and presumptively, on this occasion, he tendered him a copy of his journal written by himself, reserving the original notes. To the orders given by the Emperor for D'Angera to write the history of this expedition, were added the request of Pope Adrian VI. with whom D'Angera was on terms of close intimacy at the time, he having filled the station at court of preceptor to Charles V. D'Angera therefore wrote this history, and himself tells us, that he sent his manuscript to Rome to the Pope, who intended to have it printed in the most beautiful style; but this event did not take place until after his death ||. Ramusio adds ¶, that this manuscript was either consumed by fire, or perished on occasion of the pillage of Rome in 1527.

XXII. The same Ramusio, one of the earliest and most learned compilers of voyages, adds, on this occasion, that the memory of an enterprize so great would nearly have been entirely lost, “had not a skilful Vicentine gentleman, M. Antonio Pigafetta, given a curious and minute account of it:” of this, as we shall presently

\* Epist. 770.

† Epist. 767.

‡ Petri Martyris ob Angleria. De rebus Oceanis et orbe novo.

§ *Parten dome da Seviglia andai a Valladolid, ove apresentai a la sacra majesta de D. Carlo, non oro ne argento ma cose da essere assai apreciati da un simil Signore. Fra le altre cose li detti uno libro scripto de mia mano, de tutte le cose passate de giorno in giorno nel viaggio nostro*, pag. 230. On leaving Sevilla I proceeded to Valladolid, where I presented to His Sacred Majesty Don Carlos, not indeed gold or silver, but things precious in the eyes of such a Señor. Among others, I gave to him a book written by myself, comprizing a journal of all that occurred in course of our voyage.

|| Epist. 797.

¶ Discorso sopra il Viaggio fatto dagli Spagnuoli intorno il mondo, tom. i. p. 346.

see, an extract in French was made, which he himself translated into Italian for his collection. Now, this book is still in existence in the Ambrosian library of Milan; and, as it appears, not only has never been published, but was not even known to those who wrote the history of this surprising expedition. This work, properly speaking, is not the journal presented to the Emperor by Pigafetta, but a much more copious narrative, written by himself in Italy, in compliance with the request of Clement VII. to whom he went to pay his court, at Monte-rosi, on his return\*; and more especially with that of the Grand Master of Rhodes, Vilers de Lisle-Adam, whom he frequently addresses, even in the body of the narrative. And as in this book Pigafetta constantly assumes the title of Cavagliero, we must conclude that this work was written by him at some time posterior to the 3d of October 1524, the day on which he was installed†. But, if we possess proofs that this book was not written until several years after his return, we have likewise reason for believing that Pigafetta, in writing it, had his original notes before him, for he often uses the term *oggi* (this day) in copying what he wrote on the day it occurred. Moreover, he would otherwise have been unable to have recollected an infinite number of novel objects and extraordinary circumstances, (which I have sometimes brought together, but without alteration, in order to give more connection to the work) in pursuing, as he does, the course of events according to the time, rather than according to their relation to each other.

XXIII. After having written his book for the Grand Master of Rhodes, and after presenting a copy of it to the Sovereign Pontiff, a copy noticed by Paulus Jovius‡, he sent another copy into France to Louisa of Savoy, regent of the kingdom for her son Francis I. (that monarch being then involved in the unfortunate war in Lombardy, in which he was made prisoner, and during which Pigafetta presented himself to him on his return to Italy, and tendered some productions of the other hemisphere). The Queen gave this book to Antoine Fabre, a Parisian, reputed to be an excellent philosopher, and supposed to understand Italian, as he had been a long time at Padua; but Fabre, to save trouble, merely made an extract, and omitted what, perhaps, he did not understand; the remainder was printed in French, with a number of faults§. Notwithstanding all its faults, Ramusio, who was desirous of inserting this circumnavigation in his grand collection, translated it into Italian, and published it with two other narratives of less importance||.

He changed but very few words; abridged the preliminary discourse; suppressed the number of one hundred and fourteen chapters, into which Fabre divided the work, and added titles to the chapters into which he himself divided it. He likewise copied the grossest errors; for he translated the word *veilles* by *vele*, which signifies guards. See Paragraph XXXIV. of this Introduction.

\* See the Dedication.

† See Ruolo generale de' Cav. gerosoliminis di Fr. Bartolomeo del Pozzo, Torino 1714, where, it is worthy of remark, that the author merely recounts the names, dignities, and employments of the other knights, but in noticing the Cavagliero Pigafetta, after stating him to be "Commander of Norcia," he adds, "famous for his voyages in the Indies."

‡ Historia sui temporis, lib. xxxiv.

§ Ramusio, loc. cit.

|| I first conceived Ramusio to have been the translator, for he expresses himself in such terms as lead one to infer that it was he who first rendered into Italian the *Extrait du Voyage de Pigafetta par Fabre*, and the letter of Maximilian the Transylvanian: but I have since found that he did but copy a translation printed at Venice in 1536, in small quarto, under the title, *Il Viaggio fatto dagli Spagnuoli attorno il mondo*, MDXXXVI. — AMORETTI.

There is likewise some difference in what he says of the infibulation of the inhabitants of Zubu, as will be seen in the body of the work.

There remains, I should observe, that no bibliographer knew of this translation, which our librarian latterly by chance acquired.

XXIV. I have been unable to discover what has become of the copies which the author presented to the other personages noticed. The celebrated President DeBrosses, who collected with equal care and intelligence every thing which had transpired up to his time relating to the discovery of Europeans in the Austral regions, in speaking of the narrative of Pigafetta, directly states it to be lost \*. It appears that in the time of Montfaucon this narrative was not in existence among the manuscripts of the royal library; for in his catalogue † he only gives us the title of the French work, that is to say, of the extract of Fabre, and he would, without doubt, have given the Italian title, if he had found the original. Father Angelo-Gabrieli de Sta. Maria, who wrote the literary history of Vicenza, affirms preremptorily, that there is a copy of it in the Musæum Saibanti at Verona, and another in the library of the Vatican at Rome; but with respect to the first part of this assertion, there is none in the Saibanti Musæum, nor ever was, as I am assured by my friend M. Delbene, secretary of the Italian Society, who took the trouble of examining the catalogues, both ancient and modern, of this musæum; as to the Vatican, I have just received a note from Signor Marina, president of the library of the Vatican, in which he informs me, that after every requisite search, not only did he not find this work among the manuscripts of that library, but he had been further assured, that it was not contained either in the Urbine, Palatine, Ottobonian, or Capponian libraries. It must also be conjectured that copies of this work were not only very uncommon, but that even the family itself of our author did not possess one, since Philip and Mari-Antonio Pigafetta, of whom we have spoken in Section XII, and the latter of whom has written a history of the East Indies, make no mention of the voyage, nor of the work of their brother Anthony, which renders it fair to presume it had never been read by them. I see by the history of Castagnedar, that this writer had before him a journal of this voyage, on which he says the degrees were marked differently from what the Spaniards gave out, in view of extending their pretensions farther towards the west; and Maffei likewise informs us that Barros the Spaniard, wrote the history of the same voyage from the narratives and journals of the sailors. I am ignorant of what has become of the journals which the historians made use of but for certain they never were published.

XXV. It might be conceived that our manuscript is that which was presented by our author to the Grand Master of Rhodes; for it is tolerably well written, in a character called at that time Cancelleres co ‡, on good paper, small in folio; the geographical charts are illuminated, and the book itself is tolerably well bound. It might also be fancied to be that copy presented to the Pope, according to what Palus-

\* Navigations aux Terres Australes, tom. i. p. 121.

† Bibliotheca bibliothecarum, p. 185, b, in bibliotheca regis, No. 10270. There is at present in the national library of Paris, two manuscripts of a French translation, of the Voyage d'Antoine Pigafetta; the one on paper, which appears to be the oldest, under the No. 10270; the other on vellum, No. 4537. The last comes from the library of La Villiere. They are without date, and are not said to be the translation of Fabre, quoted here by M. Amoretti, and from which they differ even in the title; Navigation et decouvrement de la Indie superieure faite par moy Antoine Pigafetta vicentin, chevalier de Rhodes.

‡ The character thus denominated differs immaterially from that used now by lawyers, and termed engrossing.

Jovius says, that Pigafetta (whom by mistake he denominate Jerome) presented him, as well in painting as in writing, the most remarkable things belonging to the countries he visited\*. Add to this that our learned librarian Sassi, who in 1712 formed a catalogue of our manuscripts, wrote against the title of this: it is perhaps the original. Yet, notwithstanding all these conjectures, I think our manuscript is but a copy of those presented to the illustrious persons of whom I speak, and on these grounds do I found my opinion. First, at the title page, and at the head of the Dedicatory Epistle I see the name of the author written Pigafetta, at the bottom of the letter it is given Pagapheta, and at the end of the Treatise on Navigation, Pigaphetta; secondly, the manuscript is so defective in orthography, language, syntax, and logic, as oftentimes to have no meaning, as will be seen by reference to the passages I shall occasionally quote in the notes; thirdly, a third part of the volume consists of blank paper, which gives room for conjecture that this copy was designed for some one who wished to add other matters, and that the Cavallero Pigafetta never even saw it; for had he, assuredly he would have corrected the grosser faults, and would not probably have added his Treatise on Navigation; or, if he had, he would not have omitted to have given in this last work the figure to which he refers the reader, and which does not appear.

XXVI. But, though this manuscript should not be of the hand-writing of Pigafetta, it is not the less valuable; since it was, as we shall presently see, written in the lifetime of that celebrated traveller, and since it is authentic, as will be gathered from its accordance with all we know of this voyage, and the countries of which it speaks. This accordance, moreover, is especially distinguishable in the vocabularies. Indeed the errors themselves, and the fables contained in the work, prove the authenticity of the writer, who has detailed the relations made to him, and the phenomena he observed, as they presented themselves to his senses. Finally, this manuscript is unique. I have been unable to learn whence the Cardinal Frederic Barromeo, (a name ever dear to science,) and above all, those interested in the library he founded, obtained this manuscript. I shall merely observe, that on the inside of the cover is written, "Ce livre est du Chevalier Forrete:" and, as the history of Malta informs us, that, at the time of the Grand Master Villers De L'Isle-Adam, and of Pigafetta, there were two knights of Jerusalem, by name de Forret and de la Forest †, it probably belonged to either one or the other of these.

XXVII. Now, the translation of this manuscript is what I am about to publish. I have, if such an expression be permitted, translated it into pure Italian, from the original idiom, which is a mixture of Italian, Venetian, and Spanish; for, had I published it as it appears in the manuscript, instead of affording instruction and amusement, this voyage would assuredly at once have tired and disgusted the reader. From the Italian I translated it into French; but in the notes I have frequently given the passages in the very manner they occur in the manuscript. I have made use of the same names given by the author, in speaking of the new countries he saw, pointing out in the notes those by which they are at present known. For the same reason as influenced me in this instance, I have left the errors in physics and natural history as I found them in Pigafetta, contenting myself with pointing them out to the reader. Certain customs, which the author relates to have either seen himself or to have heard related, where the language was too loose for the present age,

\* Malta admiranda observandaque posteris picturâ et scriptis adnotata deposuit lococitato.

† Philibert de la Forest lived in 1513, and Jean de Forret was in Rhodes when that place was besieged in 1522. Bosso, *Istoria della sacra religione e illa ma milizia Gerofolimitana*, part ii.

have been clothed in a more decorous garb. I am not ignorant that in the narrative of our traveller useless things frequently occur; and occasionally some which are inappropriate or silly; but I reason with the President Debrosses \*, "that one is naturally anxious of knowing in what manner things were regarded by those who saw them for the first time; and that one ought to shew respect to the observations of the most early travellers, though oftentimes their conceptions are but of limited extent †;" and as many celebrated writers have handed down to us, even by extracts, the faults and mistakes of their authors, I have thought right in publishing this voyage to imitate their example.

XXVIII. There remains I should speak of the geographical charts which adorn our manuscripts. They are in number twenty-one; on these Pigafetta has traced South America, and all the islands of the Pacific Ocean and of the East Indies, where our navigators anchored, which they saw in passing, or which were pointed out to them as laying on the line of their course. These charts are coloured; the sea is blue, the earth the colour of foot, the mountains green, and the huts and houses white. In one of the charts is a pirogue, a boat used among those people, carrying two men; and in another is the clove-tree. The charts are very incorrect; but we see by them that the author has presented objects either as they struck or were pointed out to him; on which account he has placed the north on the bottom of the page, and the south at top; so that, in order to give to the several places the position commonly given by geographers, they require to be reversed ‡.

XXIX. To afford an idea of the manner in which Pigafetta designed his charts, and to render the whole work more intelligible, I have given two geographical charts, and a view of the Strait of Magellan as laid down by the moderns, thus enabling the reader to compare them with the design by the author. The first chart is a terrestrial planisphere, on which the voyage of Pigafetta is marked by points. In one of the notes of Book II. will be seen the data from which it is formed. The second chart presents, under one point of view, a collection of the charts of the manuscript, in which our traveller has represented the archipelago of the Philippines and the Moluccas, from the Mariana islands to that of Timor; and in this also I have indicated by dots the course which the vessel pursued between so many islands, forming as it were a labyrinth in a sea, which even in the present day embarrasses the navigator. At first sight, the charts of Pigafetta appear to be drawn from fancy, or, at least, to be useless to navigation, seeing there is no relation between one and another, and that the degrees of latitude and longitude are not laid down. But when these charts are joined together in the succession the author speaks of the islands marked in them, it will be seen they may be reduced to one; and that Pigafetta, with a precision far beyond what could be expected for the time, has been the first to furnish materials for the geography of these seas. I have myself, with much patience, connected these charts, reducing their dimensions, but at the same time preserving as much as possible their relative proportions; and have given in one map the whole of this archipelago, omitting only the

\* Hist. des Voyages aux Terres Australes, tom i. p. 97.

† Tome i. preface.

‡ Other geographers, and especially Ramusio and Urbano Monti, gave a similar position in their charts to the places of which they spoke. The latter, whom I shall have occasion frequently to quote, was a Milanese gentleman, who, in 1590, designed and caused to be engraven a geographical chart which comprises the whole of the earth known in his time. It is composed of sixty-four sheets, and these forming four ellipsoids, seem to have been intended to cover a globe. To each sheet the author affixed a very detailed description of the political, religious, civil, and natural history of the country there represented. The whole work was ready for the press, but the plates alone have been published. This manuscript is in our library, and is mentioned by Sassi.



islands De los Ladrones, and the Unfortunate Islands, owing to their too great distance from the others. This chart it is which the reader should keep before him on tracing the course of Pigafetta, from the instant of his leaving the islands De los Ladrones to that at which he enters again upon the Asiatic ocean, which he terms Laut Chidol, or the Great Sea. The dots will point out the run of the ships and the spots where they anchored. In order to place the islands in their true positions, I consulted the charts of Bellin and Robert, in which they are oftentimes marked under the same names, or names differing but immaterially. I am not ignorant that there are some errors in this chart, in what regards the positions of the islands; and that the latitudes and longitudes in which they are placed by the author are sometimes different from those in which they are laid down; but I likewise know that these errors are not uncommon even with the navigators and geographers of the present day, who have so much more ample means to determine positions with exactitude. It must further be observed, that Pigafetta only saw a part of the islands he designed, and that the others were many of them traced from the description of the inhabitants, or Indian pilots, on board his ship. In short, he drew some of his charts in the same manner as Father Cantova in 1722 laid down the Caroline islands (see the extracts from De Brosse's Collection of Voyages in the South Seas, in this volume): and as the celebrated Cook has, in our days, traced the islands of the South Sea from the relations of the Otaheitan Tupia.

XXX. This method, however inexact, possesses the precious advantage of the names of the islands being indicated by Pigafetta by the names applied to them by the indigenous inhabitants; this is very useful in a geographical point of view, as the names of places have frequently become unintelligible, from each navigator, either from ignorance of the proper denomination, from vanity, or to please his patrons, applying to newly-discovered countries the names of saints, their kings, friends, and protectors, or of their native country, whence much confusion and uncertainty are occasioned, as may be seen on casting an eye over the charts published in different countries by the people who successively formed establishments in the islands of the South Seas. Oftentimes the difference is only that of pronunciation; and this will not appear extraordinary to those who know that the same name pronounced by the same person has differently struck the ear, and been differently written by the navigators of our time; for example, Messrs. de Bougainville, Cook, Anderson, Foster, &c. However, to render my author better understood, I have joined to the names used by him those adopted by other geographers, as well ancient as modern; and these, at the same time, furnish an additional proof of the truth of his narrative.

XXXI. With the same object of confirming and throwing light on what Pigafetta says, I have, in notes, added to the names of the different animals and plants given by our author, those adopted by naturalists, chiefly Linnæus. I have also endeavoured to rectify the mistakes which he often makes, especially when speaking of phenomena, either seen by himself or related to him by others.

XXXII. Pigafetta, as I have already said, endeavoured to form vocabularies of the languages of the new people he visited; but I have conceived by uniting them at the close of the voyage they will not only be of greater utility, but, while they will be less tedious to the reader, will enable him at once to compare them. See the preliminary observations at the head of this preface. I speak there also of a Treatise of Navigation by the same author, which follows the description of his voyage. An extract of it is given, and I beseech the reader to peruse the preface to it, that he may become sensible how interesting it is, even by its errors, to the history of astronomy and navigation.

XXXIII. After



XXXIII. After what I have stated I flatter myself my work will be deemed of some utility, notwithstanding we have already a relation of this same voyage in some collections. All that has yet been known of it, however, has chiefly been taken from the work of Fabre, of whom I have spoken in Section XXIII. Now, Fabre has merely given an extract of it; for he says himself, *Cy finit l'extraict du dit livre, traduit de Italien en François.* "Here terminates the extract of the said book, translated from Italian into French." I shall, moreover, add, that the extract he has given is faulty; that he has omitted many things, to spare himself the trouble of translating them, as Ramusio very justly observes; and that he has been guilty of many errors, which are not in the original, as I have already noticed with respect to the line of demarcation, Section XIV. I could even cite several others, which I discovered in comparing the extract of Fabre with our manuscript. I shall give one specimen of them in copying the first page of this extract.

*Le Voyage et Navigation aux Isles de Molluque, décrit et fait de noble homme Anthoine Pigaphetta, Vincentin Chevallier de Rhodes; comence le dict Voyage lan mil cinq cens dix neuf, et de retour mil CCCCXXII le buytiesme iour de Septembre, &c. &c.*

"The Voyage and Navigation to the Islands of Molluque, described and effected by the noble man Anthoine Pigaphetta, Vincentin Knight of Rhodes; the said Voyage begins in the year one thousand and nineteen, and [the date of the] return [to port] was the 8th of September one thousand CCCCXXII."

CHAPTER I. — *The first Chapter contains the dedicatory Epistle, and how five Ships departed from the Port of Chéville; — The chief Captain was Ferrant Magaglianes; — And of the Signals which the Navigators made by night with Fires before, for all to know what was to be done; — And of the Order of the Ships, and of the Watch kept in them.*

BY comparing this passage with the translation given by me to the public it will be seen, that Fabre relates in an unintelligible manner, and in a few lines, what Pigafetta has distinctly given in a number of pages. Nevertheless, I do not assume that the extract is curtailed throughout as in the first page, but Fabre is generally very concise, very obscure, and seldom exact.

Fabre, and after him Ramusio, divided the work into a number of small chapters; but as no such division appears in the work of our circumnavigator, I shall not in this point follow their example. It appears, however, that Pigafetta has separated the parts of his voyage according to the stations, and, after his example, I shall likewise part into four books the translation of it given here, which I trust will be regarded as a novel, interesting, and instructive work, and one reflecting honour on Italy.

## VOYAGE ROUND THE WORLD,

BY THE

CAVALLERO ANTONIO PIGAFETTA, A GENTLEMAN OF VICENZA,

Published originally in Italian from a Manuscript in the AMBROSIAN LIBRARY at Milan, with Notes by

CHARLES AMORETTI,

One of the Librarians and Doctors of the Ambrosian College; formerly Secretary of the Patriotic Society of Agriculture and the Arts; one of the XL. of the Italian Society; Member of the Institute of Bologna, &amp;c.

*And afterwards translated by him into French.*

## VOYAGE AND DISCOVERY OF UPPER INDIA,

EFFECTED BY ME

ANTONIO PIGAFETTA,

A Gentleman of Vicenza, and Knight of Rhodes.

DEDICATED TO

THE VERY EXCELLENT AND ILLUSTRIOUS LORD PHILIPPE DE VILLERS LISLE ADAM,  
GRAND MASTER OF RHODES.

AS there are men whose curiosity would not be satisfied with merely hearing related the marvellous things I have seen, and the difficulties I experienced in the course of the perilous expedition I am about to describe, and who are anxious to know by what means I was enabled to surmount them; and as due credit by such would not be given to the success of a similar undertaking if they were left ignorant of its most minute details, I have deemed it expedient briefly to relate what gave origin to my voyage, and the means by which I was so fortunate as to bring it to a successful termination.

In the year 1519, I was in Spain at the court of Charles V., King of the Romans\*, in company with Signor Chiericato, then apostolical prothonotary and orator of Pope Leo X. of holy memory, who by his merits was raised to the dignity of Bishop and Prince of Teramo. Now, as from the books I had read, and from the conversation of the learned men who frequented the house of this prelate, I knew that by navigating the ocean wonderful things were to be seen; I determined to be convinced of them by my own eyes, that I might be enabled to give to others the narrative of my voyage, as well for their amusement, as advantage, and at the same time acquire a name which should be handed down to posterity.

An opportunity soon presented itself. I learnt that a squadron of five vessels was under equipment at Sevilla, destined for the discovery of the Molucca islands, whence

\* Charles V. was elected Emperor the 28th of June 1519; he consequently was but King of the Romans when Pigafetta repaired to Barcelona.

we derive our spices; and that Fernandez Magellan, a Portuguese gentleman, and commander of the order of St. Jago de la Spata, who had already more than once traversed the ocean with great reputation, was nominated captain-general of the expedition. I therefore immediately repaired to Barcelona, to request permission of His Majesty to be one on this voyage, which permission was granted. Thence, provided with letters of recommendation, I went by sea to Malaga, and from that city over-land to Sevilla, where I waited three months before the expedition was in readiness to sail.

On my return to Italy, His Holiness the Sovereign Pontiff Clement VII.\*, of whom I had the honour of an audience at Monterosi, and to whom I related the adventures of my voyage, received me with great kindness, and told me I should much oblige him in affording a copy of the journal of my voyage; I consequently made it a point of duty to satisfy, in the best manner I was able, the wishes of the Holy Father, notwithstanding the little leisure my avocations allowed.

I have described every thing in this book; and to you is it, my Lord, that I present it, beseeching your Lordship to peruse the same when the cares of the island of Rhodes† will admit of your giving it attention. This, my Lord, is the only reward to which I aspire, in devoting myself entirely to the service of your Lordship.

*VOYAGE ROUND THE WORLD, BY THE CAVALLERO ANTONIO PIGAFETTA.*

BOOK I.

*Departure from Sevilla, and thence to leaving the Strait of Magellan.*

THE captain-general Fernandez Magellan‡ had resolved on undertaking a long voyage over the ocean, where the winds blow with violence, and storms are very frequent. He had also determined on taking a course as yet unexplored by any navigator; but this bold attempt he was cautious of disclosing, lest any one should strive to dissuade him from it by magnifying the risk he would have to encounter, and thus dishearten his crew. To the perils naturally incident on a similar voyage was joined the unfavourable circumstance of the four other vessels he commanded besides his own being under the direction of captains who were inimical to him, merely on account of his being a Portuguese, they themselves being Spaniards.

Before his departure he made some regulations, as well respecting signals as the discipline of the squadron. That the ships might constantly be kept together, he established the following rules for the pilots and masters: his vessel was constantly to

\* Of the House of Medici: he was elected Pontiff in 1523, and died in 1534.

† The Turks had just rendered themselves masters of the island of Rhodes, and means were then in agitation for its re-conquest, or, otherwise, to form another establishment for the order of knights of St. John of Jerusalem. For this latter purpose, the Emperor Charles V. ceded Malta to them in 1530; and, in the interim, the Order had established its seat at Viterbo.

‡ Pigafetta writes *Magaglianes*, the Portuguese *Magalhaens*, the Spaniards *Magallanes*, the French *Magellan*.—AMORETTI. Each of these nations have altered the orthography to preserve the sound of his name. The English, on the contrary, have neither preserved the sound nor the original mode of spelling of the Portuguese name, but have adopted the orthography of the French; following the practice of the other nations, if the sound were preserved, the name should be written in English *Maghelyong*, or *Maghellyawnes*. ENG. TR.

lead the van ; and, in order that the other vessels should not lose sight of it during the night, he had a torch of wood called farol, burning on the poop. If besides the farol he lighted a lanthorn, or a rope made of rushes \*, the other vessels were to do the same, that he might be certain of their following him. When he shewed two lights without the farol, the vessels were to alter their course, either to make slower progress, or on account of adverse winds. When three fires were lighted, it was the signal for lowering the bonnet †, a sail affixed beneath the mainsail in fine weather to accelerate the speed of the ship. The bonnet is lowered when a storm is threatened, in order that it may not be in the way of the mariners on reefing the mainsail. If four lights were shewn, it was a signal to take in all the sails ; but if they were previously reefed, these fires were a direction for setting them. A greater number of lights, or the firing of a few bombards ‡, denoted the approach to land or shallows, and, consequently, that much caution was to be used in steering. He had also another signal for casting anchor.

The night was divided into three watches, the first at the beginning of night ; the second, called medora, taking place at midnight ; and the third towards the morning. The crew in consequence were formed into three divisions : the first watch was under the orders of the captain ; the pilot commanded the second, and the master the third. The commander in chief enforced the most rigid discipline, the better to secure success to the voyage.

Monday morning the 10th August 1519, the squadron having every thing requisite on board, and a complement of two hundred and thirty-seven men, its departure was announced by a discharge of artillery, and the foresail was set. We dropped down the river Betis to the bridge of Guadalquivir, passing near Juan d'Alfaraz, formerly a thickly-peopled city belonging to the Moors, where there was a bridge, of which no vestige now remains but two piers, which are yet standing in the river below the surface, and which must be guarded against ; indeed, in order to run no hazard, this part should not be navigated without pilots on board, and but at high water.

Continuing to descend the Betis we passed by Coria, and several other villages to San Lucar, a castle belonging to the Duke of Medina Sidonia. Here is the port which opens on the ocean, ten leagues distant from Cape St. Vincent, in thirty-seven degrees of latitude north. From Sevilla to this port the distance is seventeen to twenty leagues §.

Some days after the commander in chief, and the captains of the other vessels, arrived in boats at San Lucar from Sevilla ; and the stock of provisions was completed. Every morning we landed to hear mass in the church of N. D. de Barrameda ; and

\* This kind of rope is called in Spanish frenghe, and is made of a species of esparto, which is first well soaked in water and afterwards dried in the sun or in smoke ; it is well adapted for the object in view.  
AMOR.

† In order the better to explain certain sea-terms but little understood, the figure of the ship B, in a plate annexed is given. This figure is copied from a drawing in one of the charts of Monti, with this inscription : *Nave Vittoria su cui il cav. Pigafetta fece il giro del globo.* A is the mizen-mast, B the main-mast, C the gallery for the centinel on the look-out, D the foremast, E the poop, F the forecastle, G the anchor, H the bonnet, or stay-sail, which then was placed under the mainsail, but which now is fixed on the side. AMOR.

‡ Pigafetta constantly uses the term bombards ; but it is well known that, at this time, the denomination of bombards was given to cannon, and that cannon were oftentimes loaded with stones in lieu of shot.  
AMOR.

§ The league used by our author is that of fifteen to the degree of latitude, as will more distinctly be seen as we proceed.—AMOR. It is equal to 4.64 English miles and decimals. ENG. TR.

before we sailed the commodore obliged every man to go to confession ; he also strictly forbade any woman being taken on board.

The 20th September we sailed from San Lucar, steering towards the south-west, and on the 26th reached one of the Canary islands called Teneriffe, situate in twenty-eight degrees of latitude north. We stopped here for three days, at a spot where we could take in wood and water : afterwards we entered a port of the same island called Monte Rosso, where we passed two days.

A singular phenomenon was related to us respecting this island ; viz. that it never rains here, and that it has neither spring nor river, but that it produces a large tree, the leaves of which continually distil excellent water ; this is collected in a pit at the foot of the tree, and hither the inhabitants go for what water they want, and all the animals tame and wild to quench their thirst. This tree is perpetually encircled by a thick mist which doubtless supplies its leaves with water \*.

On Monday 3d October we made sail directly towards the south. We passed between Cape Verd and its islands in latitude fourteen degrees thirty minutes north. After coasting along the shores of Guinea for several days we arrived in latitude eight degrees north, where is a mountain called Sierra Leona. We here experienced contrary winds, or dead calms with rain, which continued to the equinoctial line ; the duration of the rainy weather was sixty days, a circumstance that controverts the hypothesis of the ancients †.

In latitude fourteen degrees north we experienced very impetuous squalls, which, joined to the currents, prevented our advancing. On the approach of these squalls we had the precaution of taking in our sails, and laid to until the wind abated.

In clear and calm weather, large fish called tiburoni (sharks) swam about our vessel. These fish have several rows of frightful teeth ; and if unhappily they chance to meet with a man in the sea they instantly devour him. We caught several with iron hooks ; the large ones are by no means good to eat, and the smaller are but of little esteem ‡.

In stormy weather we frequently saw what is called the corpo santo, or St. Elme. On one very dark night it appeared to us like a brilliant flambeau on the summit of a large tree, and thus remained for the space of two hours, which was a matter of great consolation to us during the tempest. At the instant of its disappearing, it diffused

\* This is a tale of ancient date. The learned pretend that this island is the Fluvialis, or Ombrion, mentioned by Pliny, (lib. vi. c. 37.) and placed by him among the Canaries : he says that in the first rain-water only is drunk, and that in the second it never rains ; but that the inhabitants collect the water which distils from the brance of a tree. Later navigators who have visited the island, say nothing of this phenomenon. AMOR. The tree is affirmed to have had existence by Bory de St. Vincent, on respectable authority. ENG. TR.

† The ancients imagined that no rain fell between the tropics, and consequently deemed this region uninhabitable. AMOR. For some entirely novel, valuable, and ingenious remarks respecting the influence of the sun on the equatorial region, see the termination of Chap. III. of a Voyage of Discovery to the Southern Islands, in this collection of voyages. ENG. TR.

‡ There are many species of sharks. The celebrated Spallanzani, lately lost to the university of Padua, is the naturalist, who of all others has best described this fish, especially as to what respects its form, its habits, and the use of its teeth. (Viaggi alle due Sicilie, tom iv.) We have in the museum of our library the head of a shark, the mouth of which, when open, measures two feet perpendicular ; it has five rows of teeth, and each tooth is an inch and a half in length, from which we may conclude how large the animal must have been to which it belonged. It is probable Septala found the teeth he mentions in the hills of Tortona (see Mus. Sept. p. 225.), where I myself discovered some at the period of rebuilding the castle. AMOR.

such a resplendent blaze of light as almost blinded us. We gave ourselves up for lost; but the wind ceased momentarily\*.

We saw birds of many kinds. Some appeared to us to have no rump; others make no nests for want of feet; but the female lays and hatches her eggs on the back of the male in the midst of the sea†. There are others called cagassela, or caca uccello (stercorarius), which live on the excrements of other birds; and I have myself oftentimes seen one of these birds pursuing another without interruption until it voided its excrement, upon which it seized with avidity‡. I likewise saw many flying-fish, and other fish in such amazing shoals, they resembled a bank in the sea.

After we had passed the equinoctial line, we lost sight of the polar star. We then steered south-south-west, making for the Terra di Verzino|| (Brazil), in latitude twenty-three degrees thirty minutes south. This land is a continuation of that on which Cape Augustin is situate in latitude eight degrees thirty minutes south.

Here we laid in a good stock of fowls, potatoes, a kind of fruit which resembles the cone of a pine-tree (the anana or pine-apple), but which is very sweet, and of an exquisite flavour, sweet reeds§, the flesh of the anta, which resembles that of a cow¶, &c. We made excellent bargains here: for a hook or a knife we purchased five or six fowls; a comb brought us two geese; and a small looking-glass, or a pair of scissors, as much fish as would serve ten people; the inhabitants, for a little bell or a ribbon, gave a basket of potatoes (patates\*\*), which is the name they give to roots somewhat resembling our turnips, and which are nearly like chestnuts in taste. Our playing-cards were an equally advantageous object of barter; for a king of spades I obtained half a dozen fowls, and the hawk even deemed his bargain an excellent one.

\* In all ages these meteors have been perceived on the tops of masts during the prevalence of storms, and they have likewise constantly been regarded as symbols of the protection of heaven. Idolators fancied them to be Castor and Pollux; and Christians have reckoned them to be saints, especially St. Elme. When the number of meteors has equalled that of the masts, they have obtained credit as representing besides St. Elme, St. Nicholas and St. Clare. The English sailors, who ridicule the idea of their being saints, yet regard them as Will o' the Wisp, or spirits, and call them Davy Jones. It is merely within the last century that naturalists have discovered them to be an effect of the electric fluid, which, being sometimes more and sometimes less abundant, sometimes positive and sometimes negative, appears more or less vivid; and, as this fluid is the cause of the storm, it is natural that that should cease at the instant the electricity becomes no longer visible in these lights on the top of the masts. Thus is a physical cause assigned for these phenomena, which Pigafetta frequently mentions.

† It was anciently imagined that the bird of paradise, of which more elaborate mention will be made in Book III. had no feet, and constructed no nests; and that the female hatched her eggs on the back of the male: but here the author speaks of another aquatic fowl with legs covered with feathers, but so short as to seem destitute of them; and, although this bird builds its nests on shore, the mother bears its young to sea on its back almost as soon as hatched. Of these birds M. de Bougainville saw several at the Falkland Islands.

‡ The stercorarius, larus parasitus, LINN. is a bird of prey, which not being amphibious, awaits in order to obtain fish the instant of those leaving the sea who dive for their prey; they then attack and pursue the latter until they force them to drop the fish they have taken. This prey which they let fall it is that has been mistaken for excrement.

|| Verzino, or Brasil wood, is the name given to a red wood formerly drawn from Asia and Africa, and which at present is almost exclusively imported from the Brazils, a kingdom to which this name has been given on account of the abundance in it of this kind of tree. Amerigo Vespucci, who was here in 1502, when he gave his name to America, said that he found here *infinito verzino, e molte buono*, Bartolozzi, Ricerche Storiche sulle Scoperte d'Amerigo Vespucci.

§ The sugar-cane, arundo saccharifera. LINN.

¶ The anta is the tapir Americanus of Linné. A species of large swine.

\*\* The patate, or batate, fortunately needs no description; it is the solanum, or hiliotropium tuberosum of Linné.

We entered this port \* on St. Lucy's day the 13th of December. The sun at noon was vertical, and we suffered much more from the heat than on passing the line.

The land of Brazil, which abounds in all kinds of productions, is as extensive as Spain, France, and Italy united: it belongs to Portugal.

The Brazilians are not Christians; still they are not idolaters, for they worship nothing; natural instinct is the only law they acknowledge. They are very long lived, for they generally reach a hundred and five, and sometimes a hundred and forty †. They go entirely naked, the women as well as the men. Their houses are long cabins, termed by them *boi*, and they lie on nets of cotton, called *hamaks* ‡, fastened by the two extremities to two strong posts. Their hearths are on the ground. One of these *bois* sometimes contains a hundred men, with their wives and children; there is consequently always much noise in them. Their boats, which they call canoes, are formed of the trunk of a tree, hollowed by means of a sharp stone; for stone is their substitute for iron, of which they are destitute. These trees are so large that a single canoe is capable of containing thirty or even forty persons, who paddle with oars similar to bakers' shovels. On seeing them so black, naked, dirty, and bald, one might mistake them easily for Charon's ferrymen.

The men and women are well made, and formed as we are. They sometimes eat human flesh; but only that of their enemies. It is neither from want or inclination they follow this practice, but owing to a custom the origin of which they thus relate. An old woman had but one son, who was killed by the enemy. Shortly after the murderer of her son was taken prisoner, and brought before her: full of revenge the mother flew upon him like a beast of prey, and tore away part of his shoulder with her teeth. This man had the good fortune not only to escape from the woman, but to rejoin his own people, to whom he exhibited the print of teeth on his shoulder, and whom he made believe (what perhaps he himself fancied to be the case) that the enemy were disposed to devour him alive. That they might not be inferior in cruelty to the others, these resolved on really devouring the enemies they might take in battle, and those again retaliated. Still they do not devour their prisoners at the instant, nor while alive; they cut them in pieces and divide the parts among the conquerors. Each individual carries away with him his allotment, dries it in smoke, and every eighth day cooks a small portion. This fact I learn from Johan Carvajo §, our pilot, who passed four years in the Brazils.

The Brazilians paint their bodies, and especially their faces, in a strange manner, and in different figures, the men as well as the women. They have short and woolly hair on the head, but none on any other part of the body, for they root it out ||. They have a vest made of the interwoven feathers of the parrot, and so arranged that the large quills of the pinions and tail form a circle round their loins, which gives them a whimsical and ridiculous appearance. Almost all the men have the lower lip pierced with three holes through which they run a cylindrical stone, very narrow and

\* Now called Rio Janeiro.

† Vespucci relates the same: he likewise notices how, by means of pebbles, they computed their age; and the proofs they gave of their longevity, by presenting to him the son, grandson, great-grandson, and the grandson's grandson, still living. *Lettere di Amer. Vespi. Bartolozzi, loco citato.*

‡ Whence evidently our word hammock. *ENG. TR.*

§ In our manuscript he is sometimes called *Carnaio*, at others *Caruaio*; it cannot however be doubted but he is the individual Johan Carvallhos, of whom Castagneda and other writers of that time make mention.

|| Many barbarous nations follow the same practice even now, making use for the purpose of bivalve shells in lieu of pincers.



about two inches long. Women and children do not wear this incommodious ornament \*. Add to this, the front of their bodies is perfectly uncovered. Their colour is more an olive than a black. Their King is called a Cacique.

The country produces an immense number of parrots, so many indeed that a small mirror will purchase eight or ten. They have likewise very handsome monkeys of a yellow colour, and resembling small lions †.

The inhabitants eat white bread made into a round shape, but which we did not fancy. It is made with the pith, or rather the epidermis of a certain tree ‡, which has much resemblance to curdled milk. They likewise have hogs, which seemed to us to have their navel on the back §; and large birds, the beak of which resembles a spoon, but which are without tongues ||.

Occasionally, for a ~~hatchet~~ or cutlass, they offered us one or more of their young daughters ¶, but never their wives; nor indeed would these consent to have connection with any but their husbands; for notwithstanding the freedom allowed to unmarried girls, when married so great is their modesty that they never submit to the embraces even of those to whom they are espoused but under the veil of night. They are subject to the most laborious toil, and often are they seen descending from the mountains, with baskets on their head, very heavy laden; never however do they go alone, their husbands, who are highly jealous, constantly accompanying them, the bow in one hand and arrows in the other. The bow is made of Brazil wood, or the black palm. If the women chance to have young children they hang them in a net of cotton, which is suspended from the neck. I could relate much more respecting their manners, but to avoid prolixity I pass over the rest.

These people are exceeding credulous and well inclined, whence their conversion to Christianity would be no difficult task. As chance would have, we excited respect and veneration. A great drought had long prevailed in the country, and as rain fell on our arrival, they attributed it to our coming. When we landed to say mass they listened with silence and an air of inquiry; and seeing us unship our boats which hung from the sides, or which followed the ships, they imagined them to be the children of the vessels, and these the mothers who gave them sustenance.

\* Vespucci (Lettera al Confalon. Soderini in Ramusio, tomo i. p. 131.) likewise saw these cylinders in use with the inhabitants of Brazil; Cook also noticed them among the Californians, and Stedman with the inhabitants of Surinam. Keate, in his account of the Pelew Islands, conceives these cylinders to have been originally formed of odoriferous wood; and that they were run through the cartilage of the nose that the wearers of them might constantly enjoy a fragrant smell.

† This monkey is the *aquiqui*. Hist. Gener. de Voy. tome xx. p. 552. AMOR. It is called also the king monkey, is the link between the ape and baboon, and has a large beard so well fashioned as to seem as if trimmed by the barber. It is heard at a great distance; and when it chatters, uses so much exertion as to foam at the mouth. Bomare. ENG. TR.

‡ All who have navigated towards the south speak of *sago*, which is the pith of a species of palm called the cabbage-palm. Stedman's Voyage to Surinam.

§ This hog is the *pecari* or *tajassu*; it has a kind of purse or odoriferous gland on the back near the rump, which has a slit in it, two or three lines in length, but upwards of an inch in depth, from which exudes an odoriferous liquor. This animal is gregarious, like the genus of which it is a singular variety, and even its young, although capable of becoming domesticated, are never made familiar. On killing the animal the purse on the back and the testicles are instantly cut away, as otherwise, in less than half an hour the meat would be spoiled, and unfit to eat. Bomare. ENG. TR. (*Sus dorso cistifero*. Linn.)

|| *Spatulæ*, a kind of duck found in parts of Europe. (It is the *anas rostro plano ad verticem dilatato*. Linn.)

¶ This strange practice is common with all the inhabitants of the South Sea. (Cook's Second Voyage, book v.)

The captain-general and myself were one day present at a singular incident. The young girls frequently came on board to barter their favours with the crew; one of the most handsome among them on this occasion made a visit with this intention to our vessel; but perceiving a nail about as long as my finger, and thinking herself unobserved, she seized it, and chose a singular place for its concealment. Was it truly for the purpose of concealment; or was it for decoration sake? This we could never learn\*.

We stayed thirteen days at this port; after which, resuming our course, we coasted along this country as far as thirty-four degrees forty minutes south where we found a large river of fresh water. Here it is that cannibals reside, or anthropophagi. One of them of gigantic size, and whose voice was loud as the bellowing of a bull, approached our vessel for the purpose of enheartening his comrades, who, apprehensive of injury from us, were withdrawing from the coast, and retiring with their effects to the interior. That we might not lose the opportunity afforded of seeing them at hand, and conversing with them, we landed about a hundred of our men, and pursued them with an intention of catching one or another of the party: but they made such huge strides that even though we ran and jumped we were unable to cover any thing like a similar space.

This river contains seven small islands: in the largest called Sta. Maria, precious stones are found. It was formerly imagined that this was not a river, but a channel which communicated with the South Sea; but it was shortly found to be truly a river, which at its mouth is seventeen leagues across. Here John de Solis, while on a voyage of discovery like us, was with sixty of his crew devoured by cannibals, in whom they placed too great confidence.

Coasting constantly along this land towards the antarctic pole, we stopped at two islands†, which we found peopled by geese and sea-wolves alone. The former are so numerous and so little wild that we caught a sufficient store for the five ships in the space of a single hour. They are black, and seem to be covered alike over every part of the body, with short feathers, without having wings with which to fly; in fact they cannot fly, and live entirely on fish: they are so fat that we were obliged to finge them, as we could not reach their feathers. Their beak is curved like a horn.

The sea-wolves are of different colour, and nearly of the size of a calf, with a head much like the head of that animal. Their ears are round and short, and their teeth very long. They have no legs; and their paws, which adhere to the body, somewhat resemble our hands, having also small nails. They are, however, web-footed like a duck. Were these animals capable of running they would be much to be dreaded for they seem very ferocious. They swim with great swiftness, and subsist on fish.

We experienced a dreadful storm between these islands, during which the lights of St. Elme, St. Nicholas, and St. Clare were oftentimes perceived at the tops of the masts; instantly as they disappeared the fury of the tempest abated.

\* In Fabre and Ramusio this incident is not mentioned, but instead it is said that at the instant the vessels approached the shore they landed some pregnant slaves who were on board, and who left the ship by themselves, were their own midwives, and brought back the new born in their arms to the ships. Pigafetta mentions no such matter; nor does it wear the least appearance of probability. We have seen in the beginning of the chapter that Magellan gave the strictest orders that no woman whatever should be taken on board.

† They stopped at Port Desiré, where are two islands, one called the Isle of Penguins, the other the Isle of Lions. Pigafetta calls the former geese, the latter wolves. The one is the *aptenodita demersa*, Linn.; the other the *phocas ursina*, Linn. commonly called seals, or sea-dogs.

On leaving these islands to continue our course, we ascended as high as forty-nine degrees thirty minutes south where we discovered an excellent port; and as winter approached (the month was May), we thought best to take shelter here during the bad weather.

Two months elapsed without our perceiving any inhabitant of the country. One day when the least we expected any thing of the kind, a man of gigantic figure presented himself before us. He capered almost naked on the sands, and was singing and dancing, at the same time casting dust on his head\*. The captain sent one of our seamen on shore, with orders to make similar gestures as a token of friendship and peace, which were well understood, and the giant suffered himself to be quietly led to a small island where the captain had landed. I likewise went on shore there with many others. He testified great surprise on seeing us; and, holding up his finger, undoubtedly signified to us that he thought us descended from heaven.

This man was of such immense stature that our heads scarcely reached to his waist†. He was of handsome appearance, his face broad and painted red, except a rim of yellow round his eyes, and two spots in shape of a heart on his cheeks. His hair, which was thin, appeared whitened with some kind of powder. His coat, or rather his cloak, was made of furs, well sewed together, taken from an animal which, as we had afterwards an opportunity of seeing, abounds in this country. This animal has the head and ears of a mule, the body of a camel, the legs of a stag, and the tail

\* The inhabitants of the islands of the South Seas cast water on their heads in token of peace. Cook's Second Voyage, book iii.

† M. de Paw, of whom I have spoken in the Introduction, (Par. XIX.) that he might support his system respecting America, which he pretends is a country newly emerged from the water, where nature is in a degraded state, is unwilling to admit the existence of these Patagonian giants, as they would militate against his system: he says that Pigafetta had a wrong view of these men, and added much to their natural dimensions in order that he might have miracles to relate. M. de Paw certainly is not equally worthy of credit with Pigafetta, who was an ocular witness, and always faithful and worthy of reliance, where what he himself has seen is a matter in discussion. As he found the Brazilians of the common form and stature, he says, "Sono disposti h'omini e femine como noi." Hence, when he assures us that the Patagonians were giants, there is reason to believe they appeared to him to be of gigantic stature. It cannot reasonably be imagined that he was mistaken, for he lived with them a length of time, compared their dimensions with his own, frequently conversed with them, learnt many words of their language, and was astonished at their voice, their weight, their strength, and the amazing quantity of food and drink they consumed; so that every thing corresponded with their bulk. These are the precise words of our traveller: "Veni uno della statura casi como uno gigante nella nave capitania. Haveva una voce simile a uno toro. Fugendo facevano tanto gran passo, che noi saltando non potevano avanzare li suoi passi. Venni uno huomo de statura de gigante. Questo era tanto grande che li davamo alla cintura, e ben disposto, haveva la faza grande et depinta. Certamente questi giganti coreno piu che cavalli. Ognuno di li duo che pigliassero mangiava una sporta de bescoto, et beveva in una fiata mezo secchio de hacqua et mangiava li forgi senza scorticarli." I might nevertheless allow M. de Paw to entertain his doubts respecting the assertions of our author, were they not confirmed by other travellers. The celebrated President Debrosses (Navig. aux Terres Australes, tome ii. p. 324,) has collected the testimony of all who have seen Patagonians, and who have spoken of them as men of extraordinary size. The navigators who have touched at this country since the appearance of his work, Byron, Wallis, Carteret, Cook, and Forster, have all of them confirmed his opinion, after well examining this monstrous race, on the existence of which much doubt was entertained. It is true that Winter, and Narborough, and finally M. Bougainville, say, that the Patagonians are but six feet and a half in height; but is their negative assertion to be placed in competition with so many positive witnesses who speak of what they have seen, examined, and measured? Mr. Debrosses has observed that these different testimonies may be reconciled notwithstanding their apparent contradiction. The inhabitants of the most southern coasts of America are not commonly of gigantic stature, but individuals of certain tribes may be of this unusual height. As they do not constantly inhabit the same spot, it will have happened that some navigators shall not have seen them. Pigafetta, who did see them, was able to speak on the subject.

of a horse; and like this last animal, it neighs\*. This man likewise wore a sort of shoe, made of the same skin †. He held in his left hand a short and massive bow, the string of which, somewhat thicker than that of a lute, was made of the intestines of the same animal; in the other hand he held arrows, made of short reeds, with feathers at one end, similar to ours, and at the other, instead of iron, a white and black flint stone. With the same stone they likewise form instruments to work wood with.

The captain-general gave him victuals and drink, and among other trifles presented him with a large steel mirror. The giant, who had not the least conception of this trinket, and who saw his likeness, now, perhaps, for the first time, started back in so much fright, as to knock down four of our men who happened to stand behind him. We gave him some little bells, a small looking-glass, a comb, and some glass beads; after which he was set on shore, accompanied by four men well armed.

His comrade, who had objected to coming on board the ship, seeing him return, ran to advise his comrades, who, perceiving that our armed men advanced towards them, ranged themselves in file without arms, and almost naked: they immediately began dancing and singing, in the course of which they raised the fore-finger to heaven, to make us comprehend that it was thence they reckoned us to have descended. They at the same time shewed us a white powder, in clay pans, and presented it to us, having nothing else to offer us to eat; our people invited them by signs to come on board our ship, and proffered to carry on board with them whatever they might wish. They accepted the invitation; but the men, who merely carried a bow and arrow, loaded every thing on the women, as if they had been so many beasts of burthen ‡.

The women are not of equal size with the men, but in recompense they are much more lusty. Their breasts, which hang down, are more than a foot in length; they paint, and dress in the same manner as their husbands, but they have a thin skin of some animal, with which they cover their nudity. They were, in our contemplation, far from handsome, nevertheless their husbands seemed very jealous.

The women led four of the animals, of which I have previously spoken, in a string, but they were young ones. They make use of these young to catch the old ones: they fasten them to a tree, the old ones come to play with them, when from their concealment the men kill them with their arrows. The inhabitants of the country, both men and women, being invited by our people to repair to the vicinage of the ships, divided themselves into two parties, one on each side the port, and diverted us with an exhibition of the mode of hunting before recited.

Six days afterwards, while our people were employed in felling wood for the ships, they saw another giant, dressed like those we had parted with, and like them armed with a bow and arrow. On approaching our people he touched his head and body, afterwards raising his hands to heaven, gestures which the men imitated. The captain-general, informed of this circumstance, sent the skiff on shore, to conduct him to the islet, in

\* This animal is the guanaco (*camelus huanacus*, Linn.), of which genus naturalists esteem the lama and vicuña, a species of camel, or rather sheep, well known from its valuable fleece. The description given of this animal by the author perfectly corresponds with the guanaco; and all travellers relate that the Patagonians are clothed in its skin. We have, in our museum, a leg of this animal, which exactly corresponds with the description given of it by Buffon. (Supplem. tom. vi. p. 204). This leg is one foot ten inches long, though cut off below the knee.

† It is on account of this shoe, which made the feet of this man resemble the foot of a bear, that Magellan called this people Patagonians. See DEBRY, *Americæ*, lib. iv. p. 66.

‡ It is an observation generally made in all countries, and in all ages, that women are treated in proportion to civilization, well or ill, and most coarsely where the least civilization exists.

the port, on which a house had been erected, to serve as a forge, and a magazine for different articles of merchandize.

This man was of higher stature, and better made than the others; he was moreover of gentler manners; he danced and sprang so high; and with such might, that his feet sunk several inches deep into the sand; he remained with us some days; we taught him to pronounce the name of Jesus, to say the Lord's Prayer, &c. which he did with equal ease with ourselves, but in a much stronger tone of voice. Finally, we baptised him by the name of John; the captain-general made him a present of a shirt, a vest, cloth drawers, a cap, a looking-glass, comb, some little bells, and other trifling things: he returned towards his own people, apparently well contented. The next day he brought us one of the large animals, of which we have made mention, and received other presents to induce him to repeat his gift; but from that day we saw nothing of him, and suspected his companions had killed him on account of his attachment to us. At the end of a fortnight four other of these men repaired to us; they were without arms, but we afterwards found they had concealed them behind some bushes, where they were pointed out to us by two of the party, whom we detained. They were all of them painted, but in a different manner to those we had seen before.

The captain wished to keep the two youngest, who, as well, were of handsomest form, to carry them with us on our voyage, and even take them to Spain; but, aware of the difficulty of securing them by forcible means, he made use of the following artifice. He presented them a number of knives, mirrors, glass-beads, &c. so that both their hands were full; he afterwards offered them two of those iron rings used for chaining felons, and when he saw their anxiety to be possessed of them (for they are passionately fond of iron), and moreover, that they could not hold them in their hands, he proposed to fasten them to their legs, that they might more easily carry them home, to which they consented; upon this our people put on the irons and fastened the rings, by which means they were securely chained. As soon as they became aware of the treachery used towards them they were violently enraged, and puffed and roared aloud, invoking Setebos, their chief demon, to come to their assistance.

Not content with having these men, the captain was anxious of securing their wives also, in order to transport a race of giants to Europe; with this view he ordered the two others to be arrested, to oblige them to conduct our people to the spot where they were; nine of our strongest men were scarcely able to cast them to the ground, and bind them, and still even one of them succeeded in freeing himself, while the other exerted himself so much that he received a slight wound in the head from one of the men; but they were in the end obliged to show our people the way to the abode of the wives of our two prisoners. These women, on learning what had happened to their husbands, made such loud outcries as to be heard at a great distance. Johan Carvajo, the pilot, who was at the head of our people, as night was drawing on, did not choose to bring away at that time the women to whose house he had been conducted, but remained there till morning, keeping a good guard. In the mean time came there two other men, who without expressing any dissatisfaction or surprise, continued all night in the hut; but soon as dawn began to break, upon saying a few words, in an instant every one took to flight, man, woman, and child; the children even scampering away with greater speed than the rest. They abandoned their hut to us, and all that it contained; in the mean time one of the men drove off, to a distance, the little animals which they used in hunting; while another, concealed behind

behind a bush, wounded one of our men in the thigh, who died immediately \*. Though our people fired on the runaways, they were unable to hit any, on account of their not escaping in a straight line, but leaping from one side to another, and getting on as swiftly as horses at a full gallop. Our people burned the hut of these savages, and buried their dead companion.

Savage as they are, these Indians are yet not without their medicaments. When they have a pain in the stomach, for example, in lieu of an operative medicine, they thrust an arrow pretty deeply down the throat, to excite a vomit, and throw up a matter of a greenish colour, mixed with blood †. The green is occasioned by a sort of thistle, on which they feed. If they have the head-ache, they make a gash in their forehead, and do the same with the other parts of their body, where they experience pain, in order to draw from the affected part a considerable quantity of blood. Their theory, as explained to us by one of those we had taken, is on a par with their practice: pain, they say, proceeds from the reluctance of the blood to abide any longer in the part where it is felt; by releasing it, consequently, the pain is removed.

Their hair is cut circularly like that of monks, but is longer, and supported round the head by a cotton string, in which they place their arrows when they go hunting. When the weather is very cold, they tie their private parts closely to the body. It appears that their religion is limited to adoring the devil: they pretend that when one of them is on the point of death, ten or twelve demons appear dancing and singing around him. One of these, who makes a greater noise than the rest, is termed Setebos, the inferior imps are called Cheleule; they are painted like the people of the country. Our giant pretends to have once seen a devil with horns, and hair of such length as to cover his feet; he cast out flames, added he, from his mouth and his posteriors.

These people, as I have already noticed, clothe themselves in the skin of an animal, and with the same kind of skin do they cover their huts, which they transport whither suits them best, having no fixed place of abode, but wandering about from spot to spot like gypsies. They generally live upon raw meat, and a sweet root called capac; they are great feeders: the two we took daily consumed a basket full of bread each, and drank half a pail of water at a draught, they eat mice raw, and without even slaying them. Our captain gave these people the name of Patagonians. We spent five months in this port, to which we gave the denomination of St. Julian, and met with no accidents on shore, during the whole of our stay, save what I have noticed.

Scarcely had we anchored in this port before the four captains of the other vessels plotted to murder the captain-general. These traitors were Juan of Carthagena, vehador ‡ of the squadron; Lewis de Mendoza, the treasurer; Antonio Cocca, the paymaster; and Gaspar de Cafada. The plot was discovered, the first was flayed alive, and the second was stabbed to the heart; Gaspar de Cafada was forgiven, but

\* It is well known that savages make use of poisoned arrows, and our travellers had even other examples of this.

† Debry has given the representation of a Patagonian in this attitude. It is possible that they may thrust an arrow into the gullet, to free themselves by vomiting, from indigestion. Sometimes savages put a wand into their mouths, in presence of their idols, to prove to them that they have nothing impure in their body. See BENZONI, published by Debry.

‡ Vehador, or veador, in the ancient Portuguese, signified the manager of a society of monks: in Spanish, this officer is called veedor, from veer, to look after. Some writers pretend that John of Carthagena was a bishop; but Pigafetta would not have omitted mention of this circumstance, and Magellan would not have punished him in such a cruel manner, had he been invested with this dignity.

a few days after he meditated treason anew. The captain-general then, who dared not take his life, as he was created a captain by the Emperor himself, drove him from the squadron, and left him in the country of the Patagonians, together with a priest, his accomplice\*.

Another mishap befel part of the squadron while we remained at this station. The ship *St. Jago*, which had been detached to survey the coast, was cast upon rocks; nevertheless, as if by a miracle, the whole of the crew were saved; two seamen came over-land to the port where we were to acquaint us of this disaster, and the captain-general sent men to the spot immediately, with some sacks of biscuit. The crew stopped two months near the place where the vessel was stranded, to collect the wreck and merchandize, which the sea successively cast on shore; and during all this time means of subsistence was transported them over land, although a hundred miles distant from the port of *St. Julian*, and by a very bad and fatiguing road, through thickets and briars, among which the bearers of provision were obliged to pass the whole night, without any other beverage than what they obtained from the ice they found, and which they were able with difficulty to break.

As for us, we fared tolerably in this port, though certain shell-fish, of great length, some of which contained pearls, but of very small size, were not edible. We found ostriches† here, foxes, rabbits much smaller than ours, and sparrows. The trees yield frankincense.

We planted a cross on the summit of a neighbouring mountain, which we termed *Monte Christo*, and took possession of the country in the name of the King of Spain.

We at length left this port (21st August) and keeping along the coast, in latitude fifty degrees forty minutes south, discovered a river of fresh water‡, into which we entered. The whole squadron nearly experienced shipwreck here, owing to the furious winds with which it was assailed, and which occasioned a very rough sea; but God and the Corpora Sancta (that is to say, the lights which shone on the summits of the masts) brought us succour, and saved us from harm. We spent two months here, to stock our vessels with wood and water; we laid in provision, also, of a species of fish nearly two feet in length, and covered with scales; it was tolerable eating, but we were unable to take a sufficient number of them§. Before we quitted this spot our captain ordered all of us to make confession, and, like good Christians, to receive the communion.

Continuing our course towards the south, on the 21st October, in latitude fifty-two degrees, we discovered a strait, which we denominated the strait of the Eleven Thousand Virgins, in honour of the day. This strait, as will appear in the sequel, is four hundred and forty miles, or one hundred and ten maritime leagues in length;

\* When Gomez, who commanded the *Sto Antonio*, after deserting the squadron in the strait, returned to *St. Julian*, he took them both on board again, and carried them back to Spain. *Lettre de Maximilien le Transilvain*.

† The American ostrich is much smaller than the African. The Brazilians call it *nhandahuacu*; and Linnæus *Struthio rheca*.

‡ This river is that of *Sta. Cruz*, which Cook has laid down in latitude fifty-one degrees south. This name was given to the river from its being entered on the 14th September, the anniversary of the exaltation of the cross.

§ It is known for certainty, that while the squadron remained in this river, viz. on the 11th October, there was an eclipse of the sun, of which all those take notice who have written the history of this voyage; and which is marked in the astronomical tables. Authors even pretend that Magellan availed himself of it to ascertain the longitude. Pigafetta, however, takes no notice of the eclipse, nor ought he so to have done; for this eclipse was visible to us indeed, but not to those in the southern part of America.



it is half a league in breadth, sometimes more, sometimes less, and terminates in another sea, which we denominated the Pacific Ocean. This strait is inclosed between lofty mountains, covered with snow, and it is likewise very deep, so that we were unable to anchor, except quite close to shore, where was from twenty-five to thirty fathoms water.

The whole of the crew were so firmly persuaded that this strait had no western outlet, that we should not, but for the deep science of the captain-general, have ventured on its exploration. This man, as skilful as he was intrepid, knew that he would have to pass by a strait very little known, but which he had seen laid down on a chart of Martin de Boheme, a most excellent cosmographer, in the treasury of the King of Portugal<sup>\*</sup>.

As soon as we entered on this water, imagined to be only a bay, the captain sent forward two vessels, the Sto. Antonio, and La Conception, to examine where it terminated, or whither it led; while we in the Trinidad and the Vittoria awaited them in the mouth of it.

At night came on a terrible hurricane, which lasted six and thirty hours, and forced us to quit our anchors, and leave our vessels to the mercy of the winds and waves in the gulph †. The two other vessels, equally buffeted, were unable to double a cape ‡, in order to rejoin us; so that by abandoning themselves to the gale, which drove them constantly towards what they conceived to be the bottom of a bay, they were apprehensive momentarily of being driven on shore. But at the instant they gave themselves up for lost, they saw a small opening §, which they took for an inlet of the bay, into this they entered, and perceiving that this channel was not closed, they threaded it, and found themselves in another ||, through which they pursued their course to another strait ¶, leading into a third bay still larger than the preceding. Then, in lieu of following up their exploration, they deemed it most prudent to return, and render account of what they had observed to the captain-general.

Two days passed without the two vessels returning, sent to examine the bottom of the bay, so that we reckoned they had been swallowed up during the tempest; and seeing smoke on shore, we conjectured that those who had had the good fortune to escape, had kindled those fires to inform us of their existence and distress. But while in this painful incertitude as to their fate, we saw them advancing towards us under full sail, and their flags flying; and when sufficiently near, heard the report of their bombards, and their loud exclamations of joy. We repeated the salutation; and when we learnt from them that they had seen the prolongation of the bay, or, better speaking, the strait, we made towards them, to continue our voyage in this course, if possible.

When we had entered into the third bay, which I have before noticed, we saw two openings, or channels, the one running to the south-east, the other to the south-west \*\*. The captain-general sent the two vessels, the Sant Antonio and La Conception to the south-east, to examine whether or no this channel terminated in an open sea. The first

\* See the Introduction, parag. xi. and the following.

† Plate ii. represents the topography of the strait of Magellan, extracted from a chart of M. de Bougainville. In the other chart annexed, is given the southern part of America, as it is in the manuscript of Pigafetta. The draught is far from exact; but the geographers of the sixteenth century have left us nothing better, as may be seen by the geography of Hortelius. The bay of which Pigafetta speaks, is Possession Bay.

‡ Cape of Possession.

§ First Gut.

|| Boucault Bay.

¶ Second Gut.

\*\* The channel on the south-east is that near Cape Monmouth, called *Detroit Supposé*, in the chart of M. de Bougainville.

set sail immediately, under prefs of canvas, not choosing to wait for the second, which the pilot wished to leave behind, as he had intention to avail himself of the darkness of the night to retrace his course, and return to Spain by the same way we came.

This pilot was Emanuel Gomez, who hated Magellan, for the sole reason that, when he came to Spain to lay his project before the Emperor of proceeding to the Moluccas by a western passage, Gomez himself had requested, and was on the point of obtaining, some caravellas for an expedition of which he would have had the command. This expedition had for its object to make new discoveries; but the arrival of Magellan prevented his request from being complied with, and he could only obtain the subaltern situation of pilot; what, however, no less served to increase his irritation, was the reflection of his serving under a Portuguese. In the course of the night he conspired with the other Spaniards on board the ship. They put in irons, and even wounded the captain, Alvaro de Meschita, the cousin-german of the captain-general, and carried him thus to Spain. They reckoned likewise on transporting thither one of the two giants we had taken, and who was on board their ship; but we learnt, on our return, that he died on approaching the equinoctial line, unable to bear the heat of the tropical regions.

The vessel, the Conception, which could not keep up with the Sant Antonio, continued to cruize in the channel to await its return, but in vain.

We, with the two other vessels, entered the remaining channel, on the south-west; and, continuing our course, came to a river which we called Sardine river\*, on account of the vast number of the fish of this denomination we found in it. We anchored here to wait for the two other ships, and remained in the river four days; but in the interim we dispatched a boat, well manned, to reconnoitre the cape of this channel, which promised to terminate in another sea. On the third day the sailors sent on this expedition returned, and announced their having seen the cape where the strait ended, and with it a great sea, that is to say, the ocean. We wept for joy: this cape was denominated Il Capo Deseado (Wished for Cape) for in truth we had long wished to see it †.

We returned to join the two other vessels of the squadron, and found the Conception alone. On enquiring of the pilot, Johan Serano, what had become of the other vessel, we learnt that he conceived it to be lost, as he had not once seen it since he entered the channel. The captain-general then ordered it to be sought for every where, but especially in the channel into which it had penetrated. He sent back the Vittoria to the mouth of the strait, with directions, if they should not find it, to hoist a standard on some eminent spot ‡ at the foot of which, in a small pot, should be placed a letter, pointing out the course the captain-general would take, in order to enable the missing ship to follow the squadron. This mode of communication, in case of a division, was concerted at the instant of our departure. Two other signals were hoisted in the same manner on eminent sites in the first bay, and on a small island of

\* Later navigators make no mention of the river of Sardines, which probably descends from the mountains of Terra del Fuego. They do not either notice the great abundance of Sardines alluded to by our author, but this is not astonishing, for these fish on their migrations remain but a short time at one place.

† Il Capo Deseado forms the western extremity of the southern coast, along which the boat steered; but the ships coasted close to the northern shore, and left America at Cape Vittoria, so called from the ship which first doubled it, and which was the only one that returned to Europe.

‡ The mountain called by M. de Bougainville Pere Aymon.

the third bay\*, on which we saw a number of sea-wolves and birds. The captain-general, with the Conception, awaited the return of the Victory, near the river of Sardines, and erected a cross on a small island, at the foot of two mountains, covered with snow, where the river had its source.

Had we not discovered this strait, leading from one sea to the other, it was the intention of the captain-general to continue his course towards the south, as high as seventy-five degrees, where in summer there is no night, or very little, as in winter there is scarcely any day. While we were in the strait, in the month of October, there were but three hours night.

The shore in this strait, which, on the left, turns to the south-east, is low. We called it the Strait of the Patagonians†. At every half league it contains a safe port, with excellent water, cedar-wood, sardines, and a great abundance of shell-fish. There were here also some vegetables, part of them of bitter taste, but others fit to eat, especially a species of sweet celery‡, which grows on the margin of springs, and which, for want of other, served us for food. In short, I do not think the world contains a better strait than this.

At the very instant of our launching into the ocean we witnessed a singular chase, of fish, pursued by others. There are three species, that is to say, dorados, albigores and bonitos, which pursue the fish called colondrins, a kind of flying-fish§. These, when followed close, issue from the water, extend their fins, of sufficient length to serve them as wings, and fly the distance of a cross-bow's shot; after this they return into the water. In the mean time their enemies, directed by the shadow of them, continue the pursuit, and instantly as they re-enter the water, make them their prey. These flying-fish are upwards of a foot in length, and are excellent eating.

During the voyage I talked with the Patagonian giant on board our ship, and by means of a species of pantomime, enquired of him the Patagonian name of a number of objects, and was thus enabled to form a small vocabulary. He had accustomed himself so perfectly to this practice, that no sooner did he see me take my pen in hand, than he came immediately to tell the name of the different things before him, and of what was passing. Among other things he shewed us the manner of kindling fire in his country; that is to say, by rubbing one piece of pointed wood against another, until fire catches to a kind of pitch of a tree, placed between the two pieces of wood. One day when I shewed him and kissed the cross, he gave me to understand by his gestures that Setebos would enter into my body, and cause me to burst. When at death's door, on his last illness, he called for the cross, which he kissed; he also begged to be baptised, which was done; he receiving the name of Paul.

\* The isle of Lions.

† This strait, it is needless to mention, afterwards received the name of Magellan, from that navigator.

‡ Apium dulce. Cook also found this vegetable here, as well as abundance of scurvy-grass; and, owing to the plenteousness of anti-scorbutic vegetables, deemed the passage of the strait preferable to that round Cape Horn. (First Voy. book 1st.)

§ *Trigla volitans*, Linn. Perhaps the fish alluded to by the author is the *Exocoetus volitans*.

## BOOK II.

*Departure from the Strait, and thence to the Death of Captain Magellan, and our leaving Zebu.*

ON Wednesday, 28th November, we left the strait, and entered the ocean to which we afterwards gave the denomination of Pacific, and in which we sailed the space of three months and twenty days, without tasting any fresh provisions. The biscuit we were eating no longer deserved the name of bread; it was nothing but dust, and worms which had consumed the substance; and what is more, it smelled intolerably, being impregnated with the urine of mice. The water we were obliged to drink was equally putrid and offensive. We were even so far reduced, that we might not die of hunger, to eat pieces of the leather with which the main-yard was covered to prevent it from wearing the rope. These pieces of leather, constantly exposed to the water, sun, and wind, were so hard that they required being soaked four or five days in the sea in order to render them supple; after this we broiled them to eat. Frequently indeed we were obliged to subsist on saw-dust, and even mice, a food so disgusting, were sought after with such avidity that they sold for half a ducat a piece\*.

Nor was this all, our greatest misfortune was being attacked by a malady in which the gums swelled so as to hide the teeth, as well in the upper as the lower jaw, whence those affected thus were incapable of chewing their food†. Nineteen of our number died of this complaint, among whom was the Patagonian giant, and a Brazilian, whom we had brought with us from his own country. Besides those who died, we had from twenty-five to thirty sailors ill, who suffered dreadful pains in their arms, legs, and other parts of the body; but these all of them recovered. As for myself, I cannot be too grateful to God for the continued health I enjoyed; though surrounded with sick I experienced not the slightest illness.

In the course of these three months and twenty days we traversed nearly four thousand leagues in the Ocean denominated by us Pacific, on account of our not having experienced throughout the whole of this period any the least tempestuous weather‡. We did not either in this whole length of time discover any land, except two desert islands; on these we saw nothing but birds and trees, for which reason we named them Las Islas Desdichados (the Unfortunate Islands.) We found no bottom along their shores, and saw no fish but sharks. The two islands are two hundred leagues apart. The first lies in latitude fifteen degrees south, the second in latitude nine degrees§. From

\* It is no uncommon thing for sailors, from hunger, to be obliged to eat mice, or even leather. In 1540, a mouse on board the squadron of Pizarro sold for four crowns. The crews of Bougainville (tom. ii. p. 173.) and of Cook, (Third Voyage, b. i. p. 28.) were fain to eat leather.

† Effects of the Scurvy.

‡ Quiros, Bougainville, and Cook assuredly were not equally fortunate.

§ Pigafetta does not present us with sufficient documents to determine exactly the position of Las Islas Desdichados. Our manuscript merely points out the one to lay north-west of the other. But from his narrative, allowing it to be correct, they belong to the Society Islands, north and north-east of Otaheite; for Pigafetta says that on leaving the strait they sailed north-west by west; afterwards north west to the equinoctial line, which they passed, one hundred and twenty two degrees west from the line of demarcation, that is to say, in one hundred and fifty-two degrees west from the first meridian. Now, if from this point we trace a line from north-west to south east, it will pass between the Society Islands on the north, and Otaheite on the east. On this line therefore should the Unfortunate Islands lie. Jaillet and Nolin have consequently placed them out of their true geographical site. It is not improperly, however, that they have given them the names, one of St. Peter, and the other of Tiburon, for the anonymous Portuguese gives them the same names. The Transylvanian says, our navigator stayed here two days to fish.

the run of our ship, as estimated by the log, we traversed a space of from sixty to seventy leagues a day; and if God and his Holy Mother had not granted us a fortunate voyage, we should all have perished of hunger in so vast a sea. I do not think that any one for the future will venture upon a similar voyage\*.

If, on leaving the straits, we had continued a western course under the same parallel, we should have made the tour of the world; and without seeing any land should have returned by Wishèd-for-Cape (Il Capo Descado), to the cape of the Eleven Thousand Virgins, both of which are in latitude fifty-two degrees south.

The antarctic has not the same stars as the arctic pole; but here are seen two clusters of small nebulous stars, which look like small clouds, and are but little distant, the one from the other †. In midst of these clusters of small stars two are distinguished very large and very brilliant, but of which the motion is scarcely apparent: these indicate the antarctic pole. Though the needle declined somewhat from the north pole, it yet oscillated towards it, but not with equal force as in the northern hemisphere. When out at sea, the captain-general directed the course the pilots should steer, and enquired how they ‡ pointed. They unanimously replied they bore in that direction he ordered them: he then informed them that their course was wrong, and directed them to correct the needle, because, being in the southern, it had not an equal power to designate the true north as in the northern hemisphere. When in midst of the ocean we discovered, in the west, five stars of great brilliancy, in form of a cross §.

We steered north-west by west till we reached the equinoctial line in one hundred and twenty-two degrees of longitude, west of the line of demarcation §. This line is thirty degrees west of the meridian ¶, and three degrees west of Cape Verd.

In our course we coasted along two very lofty islands, one of which in latitude twenty degrees south, the other in fifteen degrees south. The first is called Cipangu, the second Sumbdit Pradit\*\*.

After

\* Fifty years elapsed before another navigator made the circuit of the globe. Drake in 1578 was the first, after Magellan, who crossed this sea.

† Due nubecule, that is to say, two clusters of stars, are marked by astronomers at the southern pole: one of these is above the other below the hydra. Near the pole several stars are seen which form the constellation the octant; but as these stars are of the fifth or sixth magnitude, the two large and brilliant stars mentioned by Pigafetta must be the  $\gamma$  and  $\beta$  of the hydra.

‡ How they pointed by the compass, in what direction they steered. To correct the needle, is to add or diminish the degrees of its variation, that the compass may point to the true north.

§ Dante (Purgat. lib. i.) speaks of this cross in these verses:

I mi volsi a mau destra, e posì mente  
All'altro polo, e vidi quattro stelle  
Non visse mai fuorchè alla prima gente.  
Goder pareva il ciel di lor fiammelle.  
Oh! settentrional vedovo sito,  
Poichè privato sei di mirar quelle.

§ An imaginary line which, separating the globe into two hemispheres, divided the conquests of Portugal from those of the Spaniards according to the bull of Pope Alexander VI. See the Introduction, parag. V.

¶ Id est, the first meridian.

\*\* Cipangu is Japan; it bears this name on the globe of Behaim, on which it is termed the richest island of the east. Sumbdit-Pradit is perhaps the Antillia of the same globe, called also Septe Ritade. But on this globe these two islands are in the northern hemisphere, one in twenty degrees, the other in twenty-four degrees. Ramusio (tom. i. tav. 3.) places Cipangu in twenty-five degrees, but in chart 19. of Urban Monti I find Sumbdit in latitude nine degrees south. Delisle, on what authority I know not, places them in seventeen degrees and twenty degrees south. It must, however, be observed, that Pigafetta

After we had crossed the line we steered west-by-north. We then ran two hundred leagues towards the west; when, changing our course again, we ran west-by-south until in the latitude of thirteen degrees north\*; we trusted by this course to reach Cape Gatticara which cosmographers have placed in this latitude, but they are mistaken, this cape lying twelve degrees more towards the north. They must, however, be excused the error in their plan, as they have not like us had the advantage of visiting these parts†.

When we had run seventy leagues in this direction and were in latitude twelve degrees north, longitude one hundred and forty-six degrees, on Wednesday the 6th of March, we discovered in the north-west a small island, and afterwards two others in the south-west. The first was more lofty and larger than the other two. The captain-general meant to stop at the largest to victual and refresh‡; but this was rendered impossible, as the islanders came on board our ships, and stole, first one thing and then another, without our being able to prevent them. They invited us to take in our sails and come on shore, and even had the address to steal the skiff which hung astern of our vessel. Exasperated at length, our captain landed with forty men, burnt forty or fifty of their houses, and several of their boats, and killed seven of the people. By acting thus he recovered his skiff; but he did not deem it prudent to stop any longer after such acts of hostility. We therefore continued our course in the same direction as before.

On our entering the boats to land and punish the islanders, our sick people besought us, if any of them should chance to be killed, to bring them their intestines, persuaded that they would soon effect their cure.

When our people wounded any of the islanders with their arrows, (of which weapon they had no conception,) and chanced to pierce them through, the unfortunate sufferers endeavoured to draw out these arrows from their bodies, now by one end, now by another; after which they looked at them with astonishment, and sometimes died

does not mention having touched at the islands, but that he coasted at a short distance along them; that is to say, what he fancied to be Cipangu and Sumbdit; and which he might conceive the islands he saw to be, from Marco Polo having published that Cipangu was the most eastern island of the Indian seas; and what he terms Cipangu being the first he saw coming from the west. On his return to Spain (book 4.), he speaks of Sumbdit-Pradit as an island situate near the coast of China.

\* From these data it is that I have pointed out on the chart the run of the Squadron from the strait to the Ladrone islands. I drew a line in a direction north-west by west from Cape Victory towards the equator. Afterwards, leaving the equator at one hundred and twenty-two degrees from the line of demarcation, I traced a line to meet the former, running from north-west to south-east, and forming with it an obtuse angle, where the Squadron changed its course. North of the equator I drew a line running west-by-north, about eight hundred miles, to thirteen degrees of latitude north, and thence to the Ladrone islands. I am well aware that the degrees of longitude being inexact, the rest must be very uncertain; but the course traced presents no difficulty, and seems to have a foundation. The track laid down as pursued by Magellan by other geographers is purely ideal.

† Cape Cattigara, which our author terms Gatticara, was placed by Ptolemy in one hundred and eighty degrees of longitude from the Canary islands, and south of the equator, but Magellan knew very well that it was on the north; it is in fact in eight degrees twenty-seven minutes north: in consequence, before he reached this cape he imagined he must fall in with the Molucca islands. The modern name of this point is Cape Camorin. Vespucci was still more in error as to its latitude; for he mistook for it a western cape of the continent, to which he gave this name. (Bartolozzi, loc. cit.)

‡ This island, at which Magellan touched, is probably the island Guahan which Maximilian the Transylvanian terms Ivagana. It may be the island Rota, on which George Menriquez, captain of a vessel in the fleet of Loaisa, (who in 1526 went from Peru to the Mariana Islands,) found Gonfalso de Vigo, one of the sailors of Magellan, who had voluntarily settled here; but again, this Vigo might have passed hither from Guahan. (Debrosses, tom. i. p. 156.)

of their wounds, a circumstance that did not fail to excite our pity. Still, when they saw us about to depart, they followed us with more than a hundred canoes, and shewed us fish as if disposed to sell it; but when near us they pelted us with stones, and took to flight. We sailed through the midst of them under full sail, but they avoided our vessels with much dexterity. We likewise saw in their boats, crying and tearing their hair; some women, whose husbands probably had been killed.

These people are ignorant of any law, and are guided merely by their inclinations. They have no king, nor any chief; adore no Being or image, and go naked. Some among them have a long beard, and black hair, tied over the forehead and hanging down to the girdle. They likewise wear small hats made of palm. They are of good size and well built. Their complexion is an olive brown, but we were told they are born fair, and become dark as they increase in years. They possess the art of staining their teeth red and black, which with them is a mark of beauty\*. The women are pretty, of handsome shape, and less dark than the men. Their hair is very black, sleek, and hangs to the ground. They go naked like the men, except their privities, which they cover with a very narrow strip of cloth, or rather of the inner bark of the palm-tree. Their whole employment is in their houses, in making mats and baskets of the leaves of the palm-tree, and in other similar works. Both men and women anoint their hair, and the whole of the body, with the oil of the cocoa-nut and fefeli†.

These people live on birds, flying-fish, potatoes, a sort of figs half a foot long‡, sugar-canes and other similar productions. Their houses are of wood covered with planks, over which leaves of their fig-trees four feet in length are spread§. They have tolerably decent rooms, with rafters and window frames; and their beds are pretty soft, being made of very fine matting of the palm-tree laid upon straw. Their only arms are a lance tipped with pointed fish-bone. The inhabitants of these islands are poor, but very dextrous, and above all at thieving; for this reason we gave the name *De los Ladrones* || to the islands.

Their chief amusement consists in sailing about with their wives in canoes similar to the gondolas of Fusine near Venice¶, but they are still more narrow; all of them are painted, either black, white, or red. The sail is made of the leaves of the palm-tree sewed together, and has the shape of a latine sail. It is always placed on one side; and on the opposite side, to form an equipoise to the sail, they fasten a large wooden log, pointed at one end, with poles laid across and fixed in it, which keeps the boat steady\*\*, and admits of their sailing without apprehension; their rudder resembles a baker's shovel, that is to say, it consists of a pole fastened into a plank. They make no difference between head and stern, as they have a rudder at each end. They are excellent swimmers, and have as little fear of the sea as dolphins††.

\* The custom of blackening the teeth still prevails in the Pelew Islands adjoining to those of Mariana. Their inhabitants form a kind of paste from certain herbs, which they apply to the teeth for some days for this purpose (Keate, an Account of the Pelew Islands, p 314.)

† A species of small oily grain, very common in China, the *Ruphanos oleifer sinensis*, Linn.

‡ These figs are bananas, or the fruit of the *musa* (*musa pisang*, Linn.). In future I shall always use the term banana instead of fig, which is that the author has employed.

§ Such are the leaves of the bananier.

|| They were afterwards called *Las Ilas de las Velas*, from the number of sails continually passing; and in the time of Philip IV. of Spain they were called the Marianas, in honour of Maria of Austria, his Queen. Noort observes that, even in his time, they well deserved they name of the islands.

¶ Small long gondolas extremely narrow, used between Fusine and Venice.

\*\* Anson and Cook saw vessels navigated by the individuals of the south seas of the structure and plan here described, and much commend the ingenuity of the contrivance.

†† On this account is it, perhaps, that an island contiguous to the Mariana Islands is denominated the Island of Swimmers.



They were so much astonished at the sight of us, that we had reason to believe they had never seen any other than the inhabitants of their own island.

The 16th of March, at sunrise, we found ourselves near an elevated land, three hundred leagues from the islands De los Ladrones. We soon discovered it to be an island. It is called Zámal\*. Behind this island is another not inhabited, and we afterwards learnt that its name is Humunu†. Here the captain-general resolved on landing the next day to take in water in greater security, and take some rest after so long and tedious a voyage. Here likewise he caused two tents to be erected for the sick, and ordered a sow to be killed‡.

On Monday the 18th, in the afternoon, we saw a bark with nine men making towards us. The captain-general hereupon issued orders that none should make the least motion, or utter a single word without his leave. When they had landed, the chief of the party addressed our commander, and testified by signs the pleasure he experienced on seeing us. Four of the best dressed remained with us; the residue went to fetch their companions, who were fishing, and returned with them.

The captain, seeing them so peaceable, placed food before them, and at the same time offered them some red caps, small looking-glasses, combs, bells, bocassins§, ivory trinkets, and other similar articles. The islanders, delighted with the kindness of the captain, presented him fish, a vase full of palm-wine, which they call uraca, bananas more than a span long, with others of a smaller size and superior flavour, and two cocoa-nuts||. They signified at the same time by their gestures, that they had nothing else to offer us at that time, but that in four days they would return, and bring us rice, which they call umai, cocoa-nuts, and other provision.

Cocoa-nuts are the fruit of a species of palm-tree, which furnishes them with their substitute for bread, with wine, oil, and vinegar. In order to obtain wine they make an incision at the top of the palm-tree, penetrating to the pith of the tree, from which drops a liquor resembling white must, but which is rather tart. This liquor is caught in the hollow of a reed the thickness of a man's leg, which is suspended to the tree, and which is carefully emptied twice a day, at morning and night. The fruit of this palm-tree is of the size of a man's head, and sometimes larger. Its outward rind is green, and two fingers thick: it is composed of filaments of which they make cordage for their boats. Beneath the outward rind is a shell much harder and thicker than that of the walnut. This shell they burn, and reserve for making into a powder which they use. Within, the shell is lined with a white kernel about as thick as a finger, which is eaten in lieu of bread with meat and fish. In the center of the nut encircled by the kernel, a sweet and limpid liquor is found, of a corroborative nature. After pouring this liquor into a glass, if it be suffered to stand, it assumes the consistence of an apple. To obtain an oil, the kernel and the liquor are left to ferment; they are afterwards boiled, and yield an oil as thick as butter. To obtain vinegar, the liquor itself is exposed to the sun, and the acid which results from it resembles that vinegar we make from white wine.

\* In more modern charts it is called Samar; and it is actually situate about fifteen degrees, which make somewhat less than three hundred sea leagues west of Guahan. L'Abbe Prevô, (Hist. Gen. de Voy. tome x. p. 198.) trusting to the extract of Fabre, makes Samar no more than thirty leagues from the Marianas.

† Humunu, afterwards called the Enchanted Island, (Hist. Gen. de Voy. tome xv. p. 198.) is situate near Cape Guigan in the island Samur.

‡ He, no doubt, obtained this sow at the islands De los Ladrones, where all modern navigators have met with hogs. (Debrosses, tome i. p. 55.)

§ Bocassins are a sort of linen formerly much in use.

|| *Cocos nucifera*, Linn. We have in our museum several specimens of the fruit of the cocoa-tree, some of which exceed in size a man's head, others have a rind composed of filaments.

We likewise made a beverage which resembled goat's milk \*, by rasping the nut, mixing it with the liquor, and straining the liquor through a cloth. The cocoa-trees resemble those palm-trees which produce dates †, but their trunks, without being very smooth, have not so large a number of knots. A family of ten persons might be supported from two cocoa trees, by alternately tapping each every week, and letting the other rest, that a perpetual drainage of liquor may not kill the tree. We were told that a cocoa-tree lives a century.

The islanders became very familiar with us, by which means we were enabled to learn from them the names of many things, especially surrounding objects. From them also we learnt that their island, which is not very large, is called Zuluap. They were polite and well behaved. Out of friendship towards our captain they took him in their canoes to the warehouses where they kept their merchandize, cloves, for example, cinnamon, pepper, nutmegs, mace ‡, gold, &c. &c.; and by signs informed us that the countries towards which we directed our course produced these articles in abundance. The captain-general in return invited them on board his vessel, where he spread before them whatever by its novelty was likely to fix their attention. At the instant they were about to depart he caused a bombard to be fired, which strangely frightened them, so much indeed that they were on the point of throwing themselves into the sea in order to get away; but, with little difficulty, we succeeded in persuading them that they had no cause for apprehension, and they left us at length tranquillized, and with courtesy assured us, as they had promised before, that they would return immediately. The desert island on which we had landed was called Humuna by the islanders; but we gave it the name of Acquada degli Buoni Segnali (the Watering-place of Good Promise), on account of our finding here two fountains of excellent water, and the first indices of gold in this country. Here also white coral is found; and there are some trees, the fruit of which, smaller than our almonds, resemble the kernel of the pine cone §. Many kinds of palm are likewise seen, some of which yield fruit good to eat, while others produce none.

Perceiving around us a number of islands on the fifth Sunday of Lent, which also is the feast of St. Lazarus, we called the archipelago by the name of that saint ||. It lies in ten degrees of north latitude, and one hundred and sixty-one degrees of longitude from the line of demarcation ¶.

On Friday, the 22d of the month, the islanders kept their word, and came with two canoes full of cocoa nuts, oranges, a pitcher-full of palm-wine, and a cock, in order to shew us that they had poultry. We bought the whole of what they brought us. Their chief was an old man; his face was painted and he wore pendants in his ears.

\* In 1684 a missionary taught Cowley to make a milk of cocoa in this manner, which he found excellent. (Debrosses, tome xi. p. 55.)

† *Phoenix dactylifera*, Linn.

‡ Our author calls it *maria*: it is the second kind of the nutmeg, which has four: it is much in request for its aromatic taste. *Mace officina* Linn.

§ Possibly the pistachio tree (*Pistacia terebinthus*, Linn.)

|| They afterwards received the name of the Philippines, from Philip of Austria, the son of Charles V.

¶ The Philippines are situate between 22½ and 23½ degrees of the island of Ferro; consequently between 19½ and 20½ degrees of the line of demarcation, as is seen on the general chart. This archipelago is not therefore in 161 degrees of longitude from this line. I am ignorant whether in determining the longitude Magellan and his astrologer San Martino really gave that they computed, or whether they merely stated it thus that they might comprise the Moluccas within the 180 degrees. It is however certain that before Dampier there was an error in the computations of the longitude of 25 degrees. See Debrosses, tome ii. p. 72.

The people in his suite wore bracelets of gold on their arms, and handkerchiefs round their heads.

We laid eight days off this island, and the captain every day went on shore to visit the sick, taking with him the wine of the cocoa-tree, which was highly serviceable to them.

The inhabitants of the islands contiguous to that at which we were, had such large holes in their ears, and the ends of them were drawn down so much, that one might thrust an arm through the orifice\*.

These people are Caffres, that is to say Gentiles†. They go naked, merely wearing a piece of the bark of a tree to hide their privities, which some of their chiefs cover with a girdle of cotton cloth, embroidered with silk at the two extremities. They are of an olive colour, and generally pretty plump. They tatoo themselves, and grease the body all over with the oil of the cocoa-tree and gengeli, in order, they say, to preserve themselves from the sun and wind. They have black hair, of such length it reaches to their waist. Their arms are cutlasses, bucklers, clubs, and lances, adorned with gold. The fishing instruments they use are darts, harpoons, and nets made nearly in the same manner as ours. Their boats likewise resemble those in use with us.

On Holy Monday, 25th March, I was in the most imminent danger. We were about to set sail, and I was intent on fishing: being about to place myself for greater convenience on a yard wetted by the rain, my foot slipped, and I fell into the sea without being perceived. Fortunately a rope, belonging to one of the sails, which was hanging in the water, presented itself within my grasp; I seized it and holloed with all my might, till I was heard, and the skiff was sent round to relieve me from peril. My salvation was certainly not to be attributed to my individual merit, but to the merciful protection of the Holy Virgin.

We left the island the same day, and steered west-south-west between four islands called Cenalo, Huinangan, Ibussou, and Abarien.

On Thursday, 28th March, having distinguished fire during the night on an island near us, we steered for it in the morning, and when but little distant saw a small bark, called a boloto, with eight men in it, making for our vessel. The captain had a slave on board, a native of Sumatra, anciently called Tapobrana‡: we endeavoured to converse with the inhabitants by his means, and found they comprehended his language§. They came to within a short distance of us, but would not come on board, and seemed even to be fearful of approaching us too closely. The captain, seeing their mistrust, threw into the sea a red cap and some other trifles, attached to a plank. They took it, and seemed greatly pleased, but immediately after departed: we afterwards learnt that they hastened to make their King acquainted with our arrival.

\* All navigators speak of the large ears of newly discovered people. In other parts the author relates on this subject matters which are fabulous.

† After the Monguls had made themselves masters of India these countries were inhabited by two different nations, that is to say, Moors and the indigenous race, which latter our author denominates sometimes Caffres and sometimes Gentiles. The Moors obtained this name from their being Mahometans like the Moors of Spain. The two nations continue mingled in most of the islands, in many instances subject to Europeans; but the Gentiles daily decrease in population and power, and now inhabit little else than the mountains. (Sonnerat, *Voyage aux Indes*, tome i. p. 35.) The Moors have equally overpowered and lessened the number of the natives in the centre of Africa. (Mungo Park, *Travels in Africa*.)

‡ The Taprobana of the ancients is the island of Ceylon, and not Sumatra.

§ From the Philippines to Malacca the Malay tongue is universally spoken. It is therefore by no means astonishing an inhabitant of Sumatra should be understood in the Philippine Islands.

Two hours after we saw two *balanghais* proceeding towards us (for thus do they call their large boats), which were full of people. The King was in the largest, under a sort of canopy formed of matting. When the King came near enough to our vessel the slave of the captain spoke to him, and was understood, for the monarchs of these islands speak several languages. He ordered some of the men who accompanied him to go on board the ship, but himself remained in his *balanghay*; and as soon as his people returned he took his departure.

The captain gave a very kind reception to those who came on board, and made them presents. The King, informed of this, was desirous before he parted of presenting the captain in return with an ingot of gold and a basket full of ginger; but he refused the present, expressing thanks for his civility. Towards the evening the squadron anchored near the King's house.

The next day the captain sent the slave on shore, who served him as an interpreter, to tell the King if he would furnish us with provisions we would pay him liberally; assuring him at the same time that we had not come with any hostile intention against him, but as friends. Upon this the King himself came on board in our boat, with six or eight of his chief subjects. He embraced our captain, and presented him with three vases of porcelain full of rice, and covered with leaves, two pretty large dorados, and some other articles. The captain in turn offered him a robe à la Turque, made of red and yellow cloth, and a fine red cap. He also made several presents to the people who accompanied him: to some he gave mirrors, and to others knives. At length he caused breakfast to be served up, and directed the slave who acted as interpreter to tell the King he wished to live with him on brotherly terms, which seemed to afford him great pleasure.

He afterwards spread out cloths of different colours before the King, linens, coral\*, and other merchandize. He likewise shewed him all our fire-arms, and the great guns; and even caused several to be fired, the report of which created great consternation in the inhabitants. He caused one of us to be completely clothed in armour, and directed three men to cut at him with swords, and strive to stab him, in order to shew the King that nothing could affect a man armed after this fashion; this occasioned him great surprize, and turning towards the interpreter he observed that a man so guarded would be able to fight with a hundred: "Yes," replied the interpreter, in the name of the captain; "and each of the three vessels has two hundred men armed in the same manner." He was afterwards allowed to examine separately each distinct piece of armour, and all our arms; and the men went through the different exercises with them before him.

After this the captain conducted him to the hind-castle, or poop, and causing the chart and a compass to be brought forward, he explained to him, through the interpreter, by what means he had discovered the strait which led to the sea in which we were, and how many moons he had passed at sea without sight of land.

The King, astonished at all he had seen and heard, took leave of the captain, beseeching him in return to send two of his people to view the curiosities of his country. For this purpose the captain deputed me and another to accompany him on shore.

As soon as we landed the King raised his hands up to heaven, and afterwards turned towards us; we, as well as all who accompanied us, then did the same. The King then took me by the hand, and one of his chief people did the same with my comrade,

\* Ramusio says knives (*coltelli*), which appears more likely; but our manuscript says *corali*, and we know that navigators have oftentimes carried on a profitable traffic in coral.

in which manner we repaired to a sort of shed formed of reeds, under which was a balanghay about fifty feet long resembling a galley. We seated ourselves on the poop, and endeavoured by gestures to render ourselves understood, as we had no interpreter with us. Those in the suite of the King encircled him round, standing, and armed with spears and bucklers.

They now served up a dish of pork, with a large pitcher of wine. At every mouthful of meat we took a spoonful of wine; and when we did not wholly empty the spoon, which seldom was the case, the residue was poured into another pitcher. The spoon from which the King drank was always covered, and no one but himself was suffered to touch it. Previous to drinking, the King constantly raised his hands to heaven before he took the spoon, afterwards turning them towards us; and on taking it with the right hand, extended his left closed towards me, in such a manner that, on his first using this ceremony, I thought he was about to give me a blow with his fist; in this attitude he remained the whole time he was drinking; perceiving that all the others imitated him in this I did the same. In this manner we finished our repast, and I was unable to dispense with eating meat notwithstanding it happened to be on a Good-Friday.

Before supper I presented several articles to the King, which I had brought with me for the purpose; and at the same time enquired of him the names of several things in his language, which he was surprized to see me write down.

For supper two large dishes of porcelain were set before us, one containing rice, the other pork in the liquor in which it was boiled. At supper the same ceremony was observed as at the collation. After supper we repaired to the King's palace, which resembled in form a hay-stack. It was covered with the leaves of the bananier, and was supported at some height in the air by four large posts. So that we were obliged to use a ladder on ascending to it.

When we had entered the palace the King caused us to be seated on mats of reeds, with our legs across like tailors. Half an hour afterwards a dish of broiled fish was brought in cut in slices, some ginger fresh gathered, and wine. The King's eldest son now coming in, he was directed to seat himself beside us. Two other dishes were then served up, one of boiled fish swimming in its liquor, the other of rice, that we might eat with the heir apparent. My companion drank to excess, and was intoxicated.

Their candles are made of a kind of gum\*, which they call anime, and which is enveloped in the leaves of the palm or fig-tree.

The King, after signifying he was about to retire to rest, went away and left us with his son, with whom we slept on a matting of reeds, our heads being supported on pillows of leaves.

The next day the King came to see me in the morning, and taking me by the hand led me to the spot where we supped the preceding evening, that we might breakfast there together; but as our boat had come for us, I excused myself, and departed with my companion. The King was extremely good humoured; he kissed our hands, and we kissed his in turn.

His brother, who was King of another island†, accompanied us, together with three

\* Rather a resin.

† We shall presently see that the Kings in question ruled over two countries on the eastern coast of Mindanao, one of which was called Butuan, the other Calayan. The first has retained its name, the second is now called Caragua. The King of Butuan was at the same time King of Massana, or Mazzana, probably the Limassava of Bellin.

other persons. The captain-general retained him to dinner, and made him a present of several trifles.

The King who accompanied us informed us that gold was found in his island in lumps as large as a walnut, and even as an egg, mingled with earth; that they used a sieve for sifting it; and that all his vessels, and even many of the ornaments of his house, were of this metal\*. He was handsomely dressed in the fashion of his country, and was the finest man we saw among these people. His black hair fell down over his shoulders: his head was covered with a silken veil, and in his ears were two gold rings. From the waist to the knees he wore a tunic of cotton cloth embroidered with silk; at his side was a species of sword or dagger with a long golden hilt, and a wooden scabbard of exquisite workmanship. On each of his teeth were three golden dots†, so placed one would have thought his teeth had been fastened with this metal. He was perfumed with storax and gum benjamin. His skin was painted, but its ground colour was an olive. He resides generally in an island, in which are the two countries of Butuan and Calagan‡; but when the two Kings wish to hold a conference they repair to the island Maslana, at which we then were. The first King is denominated Rajah Colambu, the other Rajah Siagu.

On Easter day, which fell on the last day in March, the captain-general early in the morning sent our almoner on shore with some sailors to make preparations for saying mass; and at the same time he sent a message by the interpreter to the King, to inform him that we should land on his island, not to dine with him, but to perform a religious ceremony: the King approved our intention, and at the time of signifying his pleasure sent us two hogs just killed.

We landed, fifty in number, not completely armed, but at the same time armed and dressed in the best manner possible: at the instant our boats touched the shore six guns were fired as a salute. We jumped on shore, where the two Kings, who had come down to meet us at the water-side embraced our captain, and placed him between them. We proceeded thus in an orderly manner to the spot where mass was to be said, which was but a short distance from the sea.

Before mass was said the captain sprinkled the two Kings with sweet scented water. At the period of the oblation they kissed the cross as we did, but made no offering. On the elevation of the host they adored the eucharist with joined hands, imitating us in all we did. At this instant, upon signal given, a general discharge of artillery was fired from the ships. After mass some of us received the communion; which effected, the captain exhibited a dance with swords, with which the two Kings seemed much delighted.

After this he caused a large cross to be brought, garnished with nails and a crown of thorns, before which we prostrated ourselves; and in this action were again imitated

\* Sonnerat (tome ii. p. 117.) likewise speaks of Mindanao as an island abounding in gold. On this account the Philippines have been thought to be the Ophir of Solomon.

† Fabre and Ramusio say that on every finger they wore three golden rings; but our manuscript distinctly says, "in ogni dente haveva tre machie d'oro, che parevano fosseno legati con oro." This will appear the less extraordinary, when it is known that in Macassar, an island but little distant from the Philippines, some of the inhabitants have their teeth drawn in order to have golden teeth inserted in their stead. (Hist. Gen. des Voyages tom. xv. p. 97.) AMORETTI. And still the less extraordinary will it appear by reference to the voyage of discovery in the Austral Seas by Peron, a work which makes part of this Collection of Voyages. In Book VIII. mention is made of small plates of silver being fastened, by a mastic so as to be immovable, to the front teeth of some of the inhabitants of Timor. (Voy. de Dec. aux Terres Austr. tome i. p. 161.) ENG. TR.

‡ That is to say, Mindanao.

by the islanders. The captain then told the two Kings, by means of the interpreter, that this cross was the standard confided to him by the Emperor his master, to plant wherever he landed; and that in consequence he should erect it on the island, to which this symbol would moreover be auspicious; as all European ships which in future should visit it would know, on seeing the cross, that we had been received as friends, and would refrain from any violence to the persons or property of their subjects; and should any be taken prisoners, they would only have to make the sign of it to regain their liberty. He added that this cross should be placed on the most lofty spot in the neighbourhood, so that every one might see it, and that every morning it was to be worshipped. To this he added further, that by following such advice neither storms or thunder would hereafter do them injury. The Kings, who gave implicit faith to all the captain said, thanked him, and assured him by means of the interpreter that they were perfectly satisfied, and would with pleasure do as he desired.

He enquired what their religion, and whether they were Moors (Mahometans) or Gentiles (Pagans)? They replied that they adored no terrestrial object, but, raising their hands towards heaven, one Supreme Being only, whom they called Abba\*; which afforded much pleasure to our captain. The Rajah Colambu then, raising his hands to heaven, expressed his desire of shewing him some marks of his friendship. The interpreter having inquired of him wherefore provisions were so scarce, he answered that it was owing to that island not being the place of their residence, but only a spot to which he casually resorted for hunting, or to hold intercourse with his brother; and that he generally dwelt on another island where his family then was.

The captain told the King that if he had any enemies he would willingly combine with him to combat them with all his vessels and warriors. The King answered that he was indeed at war with the inhabitants of two islands; but that the present was not a fit time to attack them, and returned him thanks. In the afternoon we determined on erecting the cross on the summit of a mountain, and the festival terminated with a discharge of musquetry, our men being formed into battalions; after this the King and the captain embraced, and we returned to our ships.

Dinner ended, we all landed, dressed merely in our jackets; and, accompanied by the two Kings we ascended the highest mountain in the neighbourhood and there planted the cross. In the interim the captain expatiated on the advantages which would accrue from it to the inhabitants. We all adored the cross, and the Kings did the same. As we came down the mountain we traversed some fields in culture, and proceeded to the spot where the balanghai was, to which the Kings ordered refreshments to be brought.

The captain-general had previously inquired which was the best ports in the neighbourhood for obtaining provisions and for traffic, and learned there were three; to wit, Ceylon, Zubu, and Calagan†; but that the best of these was Zubu; and as he resolved on sailing thither, they offered him pilots for the purpose. The ceremony of adoring the cross being ended, the captain fixed upon the next day for our departure, and offered to leave an hostage with the Kings to answer for the safe return of the pilots, which they accepted.

In the morning, when on the point of heaving anchor, King Colambu caused to be intimated to us that he would willingly himself serve us as a pilot, but that he was obliged

\* In Hebrew and in Arabic Abba is father.

† Ceylon is the island Leyte, which Pigafetta has divided in twain, giving to the northern part the denomination Baybay, which is the name of a port. Calagan is Caragua in the island Mindanao; and Zubu is the island Sebu of which copious mention will be made.



to defer his departure for some days in order to gather the harvest of rice and other produce of the earth: he at the same time entreated the captain to lend him part of the crew in order to hasten the conclusion of the harvest. The captain accordingly sent him some men; but the Kings had eaten and drunk so much the day before, that whether their health suffered in consequence, whether they had not yet recovered from inebriety, they were unable to give any directions, and our men were consequently idle. The two succeeding days they worked very hard, and completed what they had to do.

We passed seven days on this island; in the course of which we had full opportunity of noticing the manners and customs of the people. The men go naked, merely covering their privities with a piece of cloth, and their bodies are painted. The women wear a petticoat made of the rind of a tree which descends from their waist downwards. Their hair is black, and sometimes so long as to reach to the ground. Their ears are bored, and adorned with rings and pendants of gold. They are great drinkers; and are constantly chewing a fruit called areca\*, which resembles a pear: they cut it in quarters, and fold it in the leaves of the same tree called betre†, which resemble those of the mulberry, and mix with it a portion of lime: after well chewing it, they spit out the masticated fruit, &c. and their mouth is deeply reddened with the juice. There are none of these islanders but chew this fruit of the betre, which, as they pretend, serves to enliven them; I am even assured that were they to abstain from this practice they would die. The animals of this island are dogs, cats, hogs, goats, and fowls; and of edible vegetables are found rice, millet, panicle, maize, cocoa-nuts, oranges, lemons, bananas, and ginger. Wax also is found on the island.

Gold abounds, as is evident from two facts to which I was witness. A man brought us a large bowl of rice and figs for which in exchange he demanded a knife. The captain in lieu of a knife, offered him some pieces of money, and among others a doubloon; but he refused the money and preferred the knife. Another offered a large ingot of massive gold for six strings of glass beads; but the captain forbade the bargain, lest the islanders should thence comprehend that we placed a higher value on gold than on glass and other merchandize.

The island Massana lies in latitude nine degrees forty minutes north, and in longitude one hundred and sixty-two degrees west of the line of demarcation. It is twenty-five leagues distant from the island Humunu‡.

We sailed from this island on the 5th April 1521, and steered south east, threading between five islands called Ceylon, Bohol, Canigan, Baybay, and Gatigan§. In this last we saw bats as large as eagles. One of them we killed and ate, and found it much resembled a fowl in taste||. Here also are pigeons, doves, parrots, and other birds, black and as large as fowls, which lay eggs equal in size to those of the duck, and an excellent food. We were told that the female lays her eggs in the sand, and that

\* The practice of chewing areca (areca catechu, Linn.) folded in leaves of betel still subsists.

† This is betel. The benefit derived from the use of betel with lime, in countries situate between the tropics, where the warmth and moisture of the atmosphere tend so much to debilitate the human frame, is noticed with much discernment by M. Peron. (Voyage of Dile. to the Austral Regions, chap. viii.; and chap. xx. sect. 7.) ENG. TR.

‡ Limaſſava is indeed in the latitude stated; but in the longitude, as elsewhere, the error is considerable.

§ Bohol retains its name. Candigan and Gatigan are found in old charts, and especially in chart xviii. of Urbano Monti. Bellin places these islands in his map, but without names.

|| Vespertilio Vampyrus. Linn.

they are hatched by the heat of the sun. From Massana to Gatigan the distance is twenty leagues.

On leaving Gatigan we steered westward, and, as the King of Massana was unable to keep pace with us in his pirogue, we waited for him near three islands called Polo, Ticobon, and Pozon \*: when he had overtaken us we caused him, with some of his attendants, to come on board our vessel, which greatly pleased him; finally we arrived at the island Zubu. From Gatigan to Zubu, the distance is fifteen leagues.

On Sunday, 7th April, we entered the port of Zubu. We passed by several villages, in which we saw houses built upon trees. When near the town the captain ordered all our colours to be hoisted, and all our sails to be taken in; and a general salute was fired, which caused great alarm among the islanders.

The captain then sent one of his pupils, with the interpreter, as ambassador to the King of Zubu. On arriving at the town they found the King surrounded by an immense concourse of people alarmed at the noise occasioned by the discharge of our bombards. The interpreter began with removing the apprehension of the monarch, informing him that this was a custom with us, and meant as a mark of respect towards him, and as a token of friendship and peace. Upon this assurance the fears of all were dissipated.

The King enquired by his minister what brought us to his island, and what we wanted. The interpreter answered that his master who commanded the squadron was a captain in the service of the greatest monarch upon earth, and that the object of his voyage was to proceed to Malucho; but that the King of Massana, at whose island we had touched, having spoken very highly of him, he had come hither to pay him his respects, and at the same time to take in provisions and give merchandize in exchange.

The King replied he was welcome, but at the same time he advised him that all vessels which might enter his port in view of trading were subject previously to pay duties: in proof of the truth of which he added, that four days had not yet elapsed since his having received port dues for a junk † from Ciam, which had come thither to take in slaves and gold; he moreover sent for a Moorish merchant, who came from Ciam with the same view, to bear witness to what he stated.

The interpreter answered, that his master being the captain of so great a king could not consent to pay duty to any monarch upon earth; that if the King of Zubu wished for peace, he brought peace with him; but if he wished to be hostile, he was prepared for war. The merchant from Ciam then approaching the King, said to him in his own language, "Cata rajah chita;" that is to say, "Take care, Sire, of that. These people," added he, for he thought us Portuguese, "are those who conquered Calicut, Malacca, and all Upper India." The interpreter, who comprehended what the Moor said, then remarked that his monarch was one vastly more powerful than the King of Portugal, to whom the Ciamese alluded, as well by sea as by land; that it was the King of Spain, the Emperor of the whole Christian world; and that if he had preferred to have him for an enemy rather than a friend he would have sent a sufficient number of men and vessels entirely to destroy his island. The Moor confirmed what the interpreter said. The King then, finding himself embarrassed, said he would advise with his ministers, and return an answer the next day. In the mean time he ordered a

\* Polo and Pozon, islands which, as well as the others, are seen in the charts of Monti and Ramusio; but are there placed too far asunder.

† A junk is a large vessel, of which elsewhere Pigafetta gives a description.

breakfast, consisting of several dishes, to be set before the deputy of the captain-general and the interpreter, all the dishes consisting of meat served up in porcelain.

After breakfast our deputies returned, and reported what had taken place. The King of Massana, who next to that of Zubu was the most powerful monarch of these islands, went on shore to announce to the King the friendly intentions of our captain-general with respect to him.

The next day the secretary of our ship and the interpreter went to Zubu. The King advanced to meet them, accompanied by his chiefs, and after causing them to be seated before him, told them that, convinced from what he had heard, he not only desisted from exacting any dues, but was ready himself to become tributary to the Emperor. They then answered that they exacted no other concession on his part than that of an exclusive commerce with the island. To this the King agreed, and charged them to assure the captain that if he truly wished to be esteemed his friend he had only to draw some little blood from his right arm and send it him, and he would do the same, which on either side would be a compact of true and substantial friendship. The interpreter answered for this being effected \*. The King then added, that all friendly captains who visited his port made presents to him, and received others in return; and that he left to the captain the choice of being the first to make or receive them. On this observation the captain remarked, that as he seemed to lay such stress on this usage, he had only to set the example, which he consented to do.

Tuesday, in the morning, the King of Massana came on board our vessel, in company with the Moorish merchant, and after saluting the captain on the part of the King of Zubu, told him he was authorized to communicate that the King was busied in collecting all the provisions he could to make a present of them to him, and that in the afternoon he would send his nephew with some of his ministers to confirm a treaty of peace. The captain thanked the deputation, and at the same time exhibited to them a man armed cap-à-pie, observing, in case of a necessity to fight, we should all of us be armed in the same manner. The Moor was terribly frightened at sight of a man armed in this manner; but the captain tranquillized him with the assurance that our arms were as advantageous to our friends as fatal to our enemies; and that we were able as readily to disperse all the enemies of our sovereign and our faith as to wipe the sweat from our brows. The captain made use of this lofty and threatening tone purposely that the Moor might make report of it to the King.

As promised, the presumptive heir to the throne came on board us in the afternoon, with the King of Massana, the Moor, the governor or minister, the provost-major, and eight chiefs of the island, to establish a treaty of peace. The captain received them with great state: he was seated in a chair covered with red velvet, and other chairs covered in the same manner were assigned to the King of Massana and the Prince; the chiefs were seated on chairs covered with leather, and the rest of the party on mats.

The captain inquired by means of the interpreter, if it was usual with them to form treaties in public, and if the Prince and the King of Massana were duly authorized to conclude a treaty with him. The answer was, that they were duly authorized, and that the conditions might be publicly discussed. The captain then made them sensible of all the advantages to be derived from this alliance, called on the God of Heaven to witness it, and added many other things which inspired them with love and veneration

\* This practice is not peculiar to the island of Zubu or the Philippines; it has recently been noticed to prevail in Timor, and even in Madagascar. See Peron's Voyage to the Southern Regions, book viii. in this Collection.

for our religion. He enquired if the King had any male children, and learnt that he had none but females, the eldest of whom was the wife of his nephew, who then was his ambassador; and who, in virtue of this marriage, was regarded as the hereditary prince. On speaking to them of the course of succession, we learnt that when parents attain a certain age they are no longer held in esteem, and that their authority then devolves to their sons. Our captain was much displeased at hearing of this usage, which he strongly condemned, seeing the Almighty who created heaven and earth, as he observed, has strictly commanded children to honour their parents, and threatened with eternal fire those who should transgress this commandment; and to make them the better apprehend the force of this divine precept, he told them that we were all alike subject to the same divine laws, as we were all alike descended from Adam and Eve. He added other observations from holy writ, which afforded much pleasure to these islanders, and inspired them with desire of being instructed in our religion; so much so indeed that they besought the captain to leave with them, at their departure, one or two men capable of teaching them, who would not fail of being held in great honour. But the captain informed them that the most essential thing was that they should be baptised, which could be effected before he should quit the country; that he could not on this occasion leave any of his people behind him; but that he would return on a future day, and bring with him priests and monks to instruct them in all things belonging to our holy religion.

At this they expressed their satisfaction, and added that they themselves would be glad to receive baptism; but that beforehand they wished to consult their monarch on this subject. The captain then admonished them by no means to be baptised through any dread with which we might have inspired them, nor through any expectation of temporal advantage; for it was not his intention to molest any one on account of his preferring the religion of his fathers: he did not, however, disguise that those who should become Christians would be more beloved and better dealt with. Every one upon this exclaimed that it was neither out of dread of nor complaisance towards us, that they sought to embrace our religion, but from a spontaneous emotion, and of their own will.

The captain then promised them, in consonance to orders he had received from his sovereign, to leave with them arms and a complete set of armour; but he told them at the same time that it was requisite their wives should likewise be baptised, as otherwise they must be divorced from and hold no communication with them if they would escape sin. Learning that they pretended to be tormented by frequent apparitions of the devil\*, he assured them that if they became Christians the devil would not afterwards dare to appear before them, but at the hour of death. These islanders, much affected and firmly persuaded of the truth of all they heard, answered, that they placed full reliance in him: on this the captain, weeping for joy, embraced them all.

He then took hold of the hand of the Prince and that of the King of Massana, and said that by the trust he had in God, by his allegiance to his sovereign the Emperor, and by the dress he wore†, he now established and vowed perpetual peace between the King of Spain and King of Zubu. The two ambassadors made a similar profession.

\* Cavendish and Noort (*Hist. Gen. des Voyages*, tome xv. p. 222.) speak of the dread entertained by the inhabitants of the Philippine Islands of apparitions of the devil.

† Probably it was the upper dress of the order of St. Iago della Spada, of which he was a commander.

After this ceremony breakfast was served up. The Indians then presented to the captain, on the part of the King of Zubu, large baskets full of rice, hogs, goats, and fowls, making excuses at the same time for the unsuitableness of the present to the dignity of so great a personage.

The captain-general in return presented to the Prince a very fine piece of white woollen cloth, a red cap, some strings of glass beads, and a glass goblet gilt, glass being in high request among these people. He made no present to the King of Massana, as he had just previously given him a Cambayan vest and several other things. He made presents at the same time to all the suite of the embassy.

After the islanders had left us, the captain sent me on shore, in company with another person, to carry the present designed for the King, which consisted of a vest of yellow and violet coloured silk, made after the Turkish fashion, a red cap, and some strings of crystal beads in a silver dish; with two gilt glasses, which we carried in our hands.

On reaching the town we found the King in his palace surrounded by a large concourse of people. He was seated on the ground on a mat of palm. He was naked, a girdle excepted which he wore about his loins, and which served to hide his sexual parts; around his head he wore a veil embroidered with the needle, on his neck a collar of great value, and in his ears two gold rings of great size set with precious stones. He was small in stature, plump, and painted with different figures burnt into the skin\*. Before him on another mat, in two vases of porcelain, were some turtles' eggs, of which he was eating, and near them four pitchers of palm wine covered with odoriferous herbs. In each of these pitchers was a hollow reed, by means of which he drank†.

After salutation on our part, the interpreter informed the King that the captain returned thanks for the present made him, and on his part had sent him certain articles, not as a compensation, but as testimonials of the sincere friendship he had lately contracted. After this preface we clothed him in the vest we brought, put the cap on his head, and proffered the other presents. Before I gave him the glass goblets, I kissed and raised them above my head: the King on receiving them did the same. He then made us partake of his eggs, and drink of his wine through the reeds he used himself. While we were regaling, those who had come from the ship related to him what the captain had said respecting peace, and the manner in which he had exhorted them to embrace Christianity.

The King wished us to stay and sup with him, but we excused ourselves and took our leave. The Prince, his son-in-law, conducted us to his own house, where we found four girls playing on music after their manner: one was beating a drum similar to our own, but placed on the ground‡; another had two kettle drums beside her, and in each hand a small drum stick, the end of it armed with cloth made of the palm, with which she struck first one and then the other; the third was beating in the same manner a large kettle-drum; and the fourth held in her hands two small cymbals, which she alternately struck one against the other and which rendered an extremely

\* At present the savages no longer use fire for tattooing themselves, but either make incisions, into which they infuse colouring liquids, or apply caustic juices to the skin for the purpose.

† The practice of drawing up their drink through reeds was remarked among these people by Noort.

‡ Even now in the islands of the South Sea drums and cymbals are the chief instruments of music in use with the inhabitants.

pleasing sound. They all of them kept such excellent time, that we conceived them to possess great knowledge of music. The kettle-drums, which are of metal or bronze, are made in the country of the Sign' Magno\*, and serve the people of that country in lieu of bells; they are called agon†. These islanders likewise play on a kind of violin, the strings of which are of copper.

These girls were very pretty, and almost as fair as Europeans; and although they were adult, they nevertheless were naked: part of them however had a piece of cloth, made of the inner bark of a tree, fastened round their waists, which descended as low as the knees; but nothing veiled from the eye any part of the body of the residue. The hole in their ears was very large, and was furnished with a wooden ring to keep it extended and preserve it of a round figure‡. Their hair was black and long, and their head was encircled by a small veil. They never wear shoes nor any covering whatever for the legs and feet. We partook of a collation with the Prince, and afterwards returned to our ships.

One of our people dying in course of the night, I returned to the King on Wednesday morning, 10th April, accompanied by the interpreter, to beg permission of him to inter the corpse, and to request he would point out to us some spot for the purpose. The King, who was encircled by a number of people, replied, that as the captain was at liberty to dispose of himself and all his subjects, he might with full propriety do what he pleased with their lands. I added that, before we could bury the defunct, it would be necessary we should consecrate the ground, and erect a cross there. The King not only gave his approbation to this measure, but stated that, as well as we did, he would adore the cross.

We consecrated, as well as we were able, the whole ground in the town set apart for sepulture of the dead, according to the rites of the church, that we might inspire the Indians with a good opinion of us, and here we interred the dead body. The same evening we again buried another.

Having this day landed a quantity of our merchandize, we placed them in a house assigned for the purpose by the King, which he took under his protection, as well as four men which the captain left in it for the purpose of trading by wholesale. These people, who are great lovers of justice, have their weights and measures. Their scales are made of a beam of wood supported in the middle by a cord. At one end is the scale to receive the things to be weighed, on the other a leaden weight equivalent to that of the scale, to which the different weights are suspended. They have likewise their measures of length and capacity.

The inhabitants of these islands are addicted to pleasure and idleness. We have already remarked the manner in which the girls play on the gongs: they have also a species of bag-pipe which much resembles ours, and which they call subin.

Their houses are constructed with beams, planks, and reeds, and are like ours divided into apartments. They are raised on posts; so that beneath them there is an empty

\* The Sinus Magnus of Ptolemy, which is the Gulf of China.

† The gong is a Chinese instrument, which is gently struck at first to excite a weak vibration of the metal of which it is composed, and afterwards gradually harder, till the vibration increasing becomes exceedingly sonorous, the sound being continual, as before it dies away a fresh and hard blow renews the vibratory motion of the metal. The shape of the gong is that of a frying pan, but with the circumference greater at the bottom which is struck than at the nether edge of the rim. It is made of a mixture of copper and tutanag. ENG. TR.

‡ Cook (Second Voyage, book ii.) explains the mode, by means of elastic rings made of the leaves of reeds, with which the holes at the end of the ears are enlarged.



space, which serves as a farm and poultry-yard, in which they keep their hogs, goats, and fowls\*.

We were told that in these seas are birds of a black colour, resembling our crows, which, when the whale appears on the surface of the water, watch the moment it opens its mouth to fly into it, and thence proceed directly to pluck out its heart, which they carry away with them to some other spot to feed upon. The only proof they have however of this fact is their having seen this black bird feeding on the heart of the whale, and their finding the whale dead and without a heart. They add that this bird is called lagan; that it has a dentated beak, and a black skin; but that its flesh is white and fit to eat†.

On Friday we opened our warehouse, and exhibited our different merchandize, which excited much admiration among the islanders. For brass, iron, and other weighty articles, they gave us gold in exchange: our trinkets, and articles of a lighter kind, were bartered for rice, hogs, goats, and other edibles. For fourteen pounds of iron we received ten pieces of gold, of the value of a ducat and a half. The captain-general forbade too great an anxiety for receiving gold; without which order every sailor would have parted with all he had to obtain this metal, which would have ruined our commerce for ever.

The King having promised our captain to embrace the Christian faith, Sunday the 14th of April was fixed upon for the ceremony. With this intent a scaffold was raised, in the place we had already consecrated, which was covered with tapestry and branches of palm. About forty of us landed, exclusive of two men armed cap-à pie, who preceded the royal standard. At the instant of our landing the vessels fired a general salute, which did not fail of alarming the islanders. The captain and the King embraced. We ascended the scaffold, on which were placed two chairs for them, covered with green and blue velvet. The chiefs of the island were seated on cushions, and the rest of the assemblage on mats.

The captain then told the King that among the other advantages that would accrue to him from embracing the Christian faith would be that of his being strengthened, so as with greater facility to overcome his enemies. The King answered, that without this consideration he felt himself disposed to become a Christian; but that he certainly should be much pleased at being enabled to enforce respect from different chiefs of the island who refused him homage, saying they were men as well as himself, and would not obey his mandates. The captain having summoned them before him, gave them, through the interpreter, to understand that, if they failed in obeying the King as their liege lord, he would cause them all to be put to death, and give their possessions to the King. Upon this the intimidated chiefs universally promised to acknowledge the King's authority.

The captain furthermore promised the King that, after he should have returned to Spain, he would come back to his country with forces far more considerable, and that he would render him the most powerful monarch in all these islands; a recompence which he considered due to him for being the first who had embraced the Christian faith. The King, raising his hands to heaven, returned him thanks, and earnestly

\* The same account rendered by Pigafetta of the houses of the Indians of the Philippine Islands is given by De Guigne in his *Voyage à l'Île de France et à Manille*, tome iii.; a voyage which makes a part of this Collection. ENG. TR.

† This is one of the tales of Pigafetta which he relates as if he credited. In favour of the relation having been made to him must be observed, that many birds feed on dead whales. A crow seen in the mouth of a dead whale by some of these islanders may possibly have been the first origin of this story.



entreated him to leave some of his people behind him, to instruct him in the mysteries of the Christian religion; which the captain promised he would do, but on condition that two of the sons of the chief men in the island should be allowed to accompany him to Spain, where they should be taught the Spanish language, in order that on their return they might give account of all they might see and hear.

After erecting a large cross in the middle of the place, a proclamation was issued ordering that all who were inclined to become Christians should destroy their idols and substitute the cross in their stead. The captain then taking the King by the hand, conducted him to the platform, where he was dressed entirely in white, and was baptised, together with the King of Massana, the Prince his nephew, the Moorish merchant, and others, in number five hundred. The King, who was called Rajah Humabon, received the name of Charles, after the Emperor: the others received other names. Mass was afterwards celebrated, after which the captain invited the King to dinner; but his Majesty excused himself, accompanying us however to the boats which took us back to the squadron, on which another general salute was fired.

Soon as we had dined we went on shore in great numbers, with our almoner, to baptise the queen and other women. We ascended the platform with them. I shewed the Queen a small image of the Virgin with the infant Jesus, with which she was much affected and delighted. She begged it of me to replace her idols, and with great willingness I acceded to her request\*. The Queen received the name of Jane, from the mother of the Emperor; the Prince's spouse that of Catherine, and the Queen of Massana that of Isabella. On that day we baptised altogether more than eight hundred persons, men, women, and children.

The Queen, a young and handsome woman, was completely dressed in black and white cloth; on her head she wore a very large hat in the shape of an umbrella, formed of the leaves of the palm-tree, and surmounted by a triple crown formed of similar leaves and resembling the papal tiara. This hat she constantly wears, never going abroad without it. Her mouth and nails were of a very lively red.

Towards evening the King and Queen came to the sea-shore where we were, and listened with satisfaction to the innocent noise of our guns, a noise which before had occasioned them so much alarm.

At this time all the inhabitants of Zubu and the neighbouring islands were baptised, those of one village in one of the islands alone excepted, who refused obedience to the injunctions of the King or our captain-general: after burning the village, a cross was erected on the spot, because it was a village of idolaters; if the inhabitants had been Moors, *i. e.* Mahometans, a pillar of stone would have been raised to mark the hardness of their hearts.

The captain-general landed every day to hear mass, on which occasion many new Christians also attended, for whom he made a kind of catechism in which many points of our religion were explained.

One day the Queen also came in state to hear mass. She was preceded by three young girls, with each one of her hats in their hands: she was dressed in black and white, and with her head and shoulders covered by a large veil of silk striped with gold. Many women accompanied her, each wearing a small veil surmounted by a hat; they

\* Chance, or the care of some inhabitant who looked upon it as an idol, occasioned its preservation to the year 1598, at which time the Spaniards, having returned with the missionaries, found and caused great respect to be shown it; on this occasion it was that they gave the name of Jesus to the town they built on the island. (*Histoire Generale des Voyages*, tome xv. p. 35.)

were otherwise naked, save a small girdle of palm cloth about their middle: their hair hung loose. The Queen, after bowing to the altar, seated herself on a cushion of embroidered silk; and the captain sprinkled her and her attendants with rose water, a scent in which the women of this country much delight.

That the King might obtain more respect and be better obeyed, our captain-general caused him to attend mass one day dressed in silk, and ordered his two brothers to be conducted to the ceremony, one of whom was called Bondara, and was the father of the hereditary prince, the other Cadaro; with these also were brought thither several chiefs, whose names were Simicut, Sibuaia, Sifacai \*, Magalibe, &c. From these severally he exacted on the altar an oath to obey the King; after which all of them kissed his hand.

The captain next caused the King of Zubu to swear that he would continue submissive and faithful to the King of Spain. After his having taken this oath, the captain-general drew his sword before the image of Our Lady, and told the King that after a similar engagement, a man ought rather to die than fail in observance of it; and that for his part he was ready to undergo a thousand deaths rather than falsify an oath thus sworn by the image of Our Lady, by the life of the Emperor his master, and by his own habit. He then made him a present of a velvet chair, recommending him to cause it to be carried before him by one of his chiefs wherever he went, and instructing him how this was to be effected.

The King promised the captain to do exactly as he was desired; and to give him a fresh mark of his personal attachment to him, he caused some jewels to be worked, which he designed as a present for him: these consisted of two gold pendants for the ears, of pretty large size, two bracelets of gold for the arms, and two others for the small of the leg, all of them ornamented with precious stones. These rings are the chief ornaments of the Kings of these islands, who constantly go naked and without any shoes or stockings, their only vestment being a bit of cloth which hangs down from the waist to the knees.

The captain, who had directed the King and the other newly made Christians to burn their idols, which they had promised to do, seeing they not only continued to preserve them but made sacrifices to them of meat according to custom, complained loudly of and highly blamed this breach of promise. They did not deny the fact; but sought to excuse themselves by saying, it was not on their own account they made these sacrifices; but for a sick person to whom they hoped the idols would restore health. This sick man was the brother of the Prince, who was looked upon as the wisest and most valiant personage in the island; and his illness had attained such a height that four days had already elapsed since he had lost his speech.

The captain hearing this, animated with holy zeal, said, if they had truly faith in Jesus Christ, they must immediately burn all their idols and cause the sick man to be baptised, who would then recover. He moreover added that he was so perfectly convinced of what he said, that he would consent to lose his head if what he promised did not immediately take place. The King consented to all he required. We then made a procession with all imaginable pomp from the place where we were to the house of the sick man, whom we found in reality in a very sad condition, such indeed that he could neither speak nor move. We baptised him, together with two of his wives and his ten daughters. The captain then asked him how he found himself, and he answered, of a sudden recovering his speech, that, thanks to the Lord, he found

\* It appears that Si or Ci placed before a man's name is a title of honour.

himself very well. We were all of us ocular witnesses of this miracle. The Captain then, with greater fervour than the rest of us, returned praise to God. He administered a restorative cordial to the sick man, and repeated the same every day until he was perfectly recovered. He at the same time sent him a mattress, blankets, a coverlid of yellow linen, and a pillow.

On the fifth day the sick man was perfectly recovered and quitted his couch. His first care was to cause an idol which was held in great veneration, and which was secreted with greatest care by some old women in his house, to be burned in presence of the King and all the people. He likewise caused several temples to be demolished which were built on the margin of the sea, and where the people assembled to eat the meat offerings presented to the idols. All the inhabitants approved of these doings, and determined on utterly destroying every idol, those even which ornamented the King's house, crying at the same time, "Viva la Castilla," in honour of the King of Spain.

The idols of these countries are of wood hollowed behind; their arms and legs are extended and their feet turned up; they have a disproportionately large face with four very large teeth in front similar to those of the wild boar\*. Generally speaking they are painted.

Now I am speaking of their idols, I shall relate to your lordship† some of their superstitious ceremonies, one of which is blessing the hog. The ceremony begins with beating large gongs. Three large dishes are afterwards brought, two of which contain broiled fish, and cakes of rice and millet folded in leaves; on the third are Cambayan cloths and two fillets of cloth made from the palm tree. Two old women then advance, each of which holds in her hand a large trumpet‡ of bamboo. They place themselves upon the cloth, salute the sun, and clothe themselves in the other cloths which were in the dish. The first of these old women covers her head with a handkerchief tied round her forehead in such manner as to present two horns; and taking another handkerchief in her hand she dances, and at the same time sounds the trumpet, invoking the sun at intervals. The other old woman takes one of the fillets of palm tree cloth, and in a like manner dances and sounds the trumpet, and turning towards the sun addresses some words to that luminary. The first then snatches up the other fillet of palm tree cloth, throws away the handkerchief she held in her hand, and both together the two sound their trumpets and dance round the hog, which is tied and lies on the ground. In the mean time the first old woman addresses the sun in a low tone of voice, and is answered by the other. After this a cup of wine is presented to the first which she takes, but without stopping her dancing or her addresses to the sun, and brings the cup to her mouth four or five times pretending to drink, but the liquor she pours over the heart of the hog. She then returns the cup and receives a lance which she brandishes, still continuing to dance and speak, and directs it repeatedly to the heart of the hog, which in the end she pierces with a sudden and forcible blow. As soon as the lance is withdrawn from the wound it is closed and dressed with salutary herbs. During the whole of this ceremony a flambeau is kept burning, which the old woman, who pierced the hog through the heart, seizes and extinguishes by thrusting it into the mouth of the animal. The other old woman dips the end of her trumpet in the blood of the hog, and with the blood on it stains the forehead of all persons present, beginning with her

\* Vishnou, in one of his incarnations, is represented with the visage of a wild boar. Sonnerat, tom. i. page 161.

† Pigafetta here addresses himself to the grand master of Rhodes. ENG. TR.

‡ Among the musical instruments of the Indians, Sonnerat saw and has given the representation of a large trumpet similar to the one here described. See plate xxvii. fig. 4.

husband ; but she did not come towards us. This being finished, the two old women undress themselves, eat what had been brought in the two first plates, and then invite the women, but not the men, to partake with them. The hog is then seared. Never is this animal eaten before it has undergone a similar purification, and none but old women officiate on the occasion.

At the death of one of their chiefs the ceremonies practised are, likewise, very singular, as I have myself witnessed. The most distinguished women in the country repaired to the house of the defunct, in the middle of which the corpse was placed in a case, round which a barrier of cords was made. To these cords branches of trees were fastened ; and between these branches hangings of cotton were suspended so as to form alcoves. Beneath these alcoves the women alluded to seated themselves, covered with a white cloth. Each woman was attended by a servant who cooled her with a fan of palm. The other women with mournful countenances were seated round the chamber. One among them had a knife with which she gradually cut off the hair of the dead. Another, who had been the principal wife of the deceased, (for though a man may have as many wives as he pleases, there is but one mistress,) stretched herself in such manner on the corpse that her mouth, hands, and feet were opposed to those of the dead. While the one was cutting off his hair, the other was crying ; and she began to sing as soon as the work was completed. All round the chamber vases of porcelain were placed containing fire, into which at intervals myrrh, storax, and gum benjamin were cast, which diffused a most pleasing fragrance. These ceremonies continue five or six days, during which the corpse remains in the house ; I believe the precaution is used of embalming it with camphor to prevent putrefaction. At length the body is fastened down with wooden pins and interred in the cemetery, which is an enclosure covered with canopies.

We were assured that every night a black bird, the size of a crow, came at midnight and perched on the houses, and by its screams frightened the dogs, who never ceased barking till break of day. We never were able to learn the cause of this singular phenomenon of which we were all of us witnesses.

I shall mention another of their strange customs. I have already said that these Indians go naked, or with only a piece of cloth of the palm to cover their privities. All the men, young as well as old, have a sort of fibula consisting of a bar of gold or tin of the size of a goose quill, which traverses the prepuce from one side to the other over the glans, leaving an opening in the middle for the passage of the urine ; this bar, at the two ends, is fastened by means of heads similar to those of our large nails ; these even are oftentimes jagged with points so as to represent a star.

They informed me that this extraordinary ornament is never removed, not even in the act of coition ; that it was their wives who invented and insisted on this usage ; and that it was they themselves who prepared their children for its affixture from their early infancy\* ; what, however, is certain, notwithstanding this strange invention, all the women gave us a preference to their husbands†.

Pro-

\* In the first translation into modern Italian of the *Extrait de Pigafetta*, is read : *Grandi e piccoli hanno il membro bucato da una parte all'altra appresso il capo, e in quel buco hanno messo come una verghetta d'oro grossa come una penna d'oca ; i altri mettono come una stella acuta sopra la testa del membro pur d'oro.*

† For decency's sake the text is much abridged : the original runs thus. *Grandi et piccoli hanno passato il suo membro circa de la testa de luna parte a laltra con uno fero de oro hoverso de stano grosso como una penna de ocha, e in uno capo et laltro del medesimo fero alcuni como una stella con ponte sopra li capi altri como una testa di chiodo da curo assaissime volte lo volsi vedere da molti cosi vequi como juveni perchè non lo poteva credere nel mezzo del fero e un buto per il quale urinano il fero e le stelle sempre stanno ferme*

Provisions abound in this island. Besides the animals I have already mentioned, there are dogs and cats which, like the others, are both of them eaten. There also grow rice, millet, panicle, and maize, oranges, lemons, sugar canes, cocoa nuts, pumpkins, garlic and ginger; honey also abounds, with various other productions; palm wine is made; and a great quantity of gold is collected.

When any of us went on shore, whether it happened by day or by night, the Indians constantly invited us to eat and drink. They never thoroughly dress their meat, and salt it very much, which excites them to drink, and at their meals they drink often, by means of hollow reeds, from the vases which contain their wine. They commonly remain five or six hours at table.

In this island are many villages, the chiefs of each of which are one or several in number, and persons much respected. The following are the names of the villages and their respective chiefs: Cingapola, its chiefs Cilaton, Cighibucan, Cimanenga, Cimaticat, and Cicanbul; Mandani, its chief Aponoan; Lalan, its chief Teten; Lalutan, its chief Japaa; and Lubucin, the chief of which is Cilumai. All these villages were subject to us, and paid us a kind of tribute.

Contiguous to the island Zubu is another called Matan, which has a port of the same name, in which our vessels laid at anchor. The chief village of this island is likewise called Matan, over which Zula and Cilapulapu presided as chiefs. In this island the village of Bulaia was situate, which we burnt.

On Friday 26th April, Zula, one of these chiefs, sent one of his sons with two goats to the captain-general, and observed, that if he did not send him the whole of what he had promised, the blame was not to be imputed to himself, but to the other chief Cilapulapu, who would not acknowledge the authority of the King of Spain: he further stated, that if the captain-general would only send to his assistance the following night a boat with some armed men, he would engage to beat and entirely subjugate his rival.

On receiving this message the captain general determined on going himself with these boats. We entreated him not to hazard his person on this adventure, but he answered, that as a good pastor he ought not to be away from his flock.

At midnight we left the ship sixty in number, armed with helmets and cuirasses. The Christian King, the Prince his nephew, and several Chiefs of Zubu, with a number of armed men, followed us in twenty or thirty balanghays. We reached Matan three hours before day. The captain would not then begin the attack; but he sent the Moor on shore to inform Cilapulapu and his people, that if he would acknowledge the sovereignty of the King of Spain, obey the Christian King of Zubu, and pay the tribute he demanded, they should be looked upon as friends, otherwise they should experience the strength of our lances. The islanders, nothing intimidated, replied, they

ferme Loro dicono che le sue moglie voleno cussi et se fossero de altra sorte non ufariano con elli Quando quelli vogliono uzare loro medisme lo pigliano non in ordine . . . . . Quelli popoli uzanno questo perchè sono di debille natura . . . . . A tuete da sey anni insu apoco apoco li aprono la natura per cagione, etc. It will be no matter of surprise to those who have read in the relations of travellers of the manners and the industry of the women of these islands in matters of this kind, that their lubricity should have given rise to this invention. See the letter of Amerigo Vespucci in Ramusio, tom. i. p. 131; and *Nouv. Recherches sur les Americains*, part i. Noort and Cavendish, who sailed through the same seas in 1600, found this practice still continued; and to them it was related to be an invention of the women to prevent the practice of unnatural propensities in the men. *Hist. Gen. des Voyages*, tom. x. p. 357. The two authors above cited do not however mention that it was not occasionally removed. This custom must have ceased, as modern navigators make no allusion to it.

had lances as well as we, although they were only sticks of bamboo pointed at the end, and staves hardened in the fire. They merely requested that they might not be attacked in the night, as they expected reinforcements, and should then be better able to cope with us : this they said designedly to induce us to attack them immediately, in hope that thus we should fall in the dykes they had dug between the sea and their houses.

We accordingly waited day-light, when we jumped into the water up to our thighs, the boats not being able to approach near enough to land, on account of the rocks and shallows. The number which landed was forty-nine only, as eleven were left in charge of the boats. We were obliged to wade some distance through the water before we reached the shore.

We found the islanders, fifteen hundred in number, formed into three battalions, who immediately on our landing fell upon us, making horrible shouts ; two of these battalions attacked us in flank, and the third in front. Our captain divided his company into two platoons. The musketeers and cross-bowmen fired from a distance the space of half an hour without making the least impression on the enemy ; for though the ball and arrows penetrated their bucklers made of thin wood, and even wounded them at times in their arms, this did not make them halt, as the wounds failed of occasioning them instant death as they expected, on the contrary, it only made them more bold and furious. Moreover, trusting to the superiority of their numbers, they showered on us such clouds of bamboo lances, staves hardened in the fire, stones, and even dirt, that it was with difficulty we defended ourselves. Some even threw spears headed with iron at our captain-general, who, to intimidate and cause them to disperse, ordered away a party of our men to set fire to their houses, which they immediately effected. The sight of the flames served only to increase their exasperation : some of them even ran to the village which was set on fire, and in which twenty or thirty houses were consumed, and killed two of our men on the spot. They seemed momentarily to increase in number and impetuosity. A poisoned arrow struck the captain in the leg, who on this ordered a retreat in slow and regular order ; but the majority of our men took to flight precipitately, so that only seven or eight remained about the captain.

The Indians perceiving their blows were ineffectual when aimed at our body or head, on account of our armour, and noticing at the same time that our legs were uncovered, directed against these their arrows, javelins, and stones, and these in such abundance, that we could not guard against them. The bombards we had in our boats were of no utility, as the levelness of the strand would not admit of the boats being brought sufficiently close in shore. We retreated gradually, still continuing to fight, and were now at a bow's-shot from the islanders, and in the water up to our knees, when they renewed their attack with fury, throwing at us the same lance five or six times over as they picked it up on advancing. As they knew our captain, they chiefly aimed at him, so that his helmet was twice struck from his head ; still he did not give himself up to despair, and we continued in a very small number fighting by his side. This combat, so unequal, lasted more than an hour. An islander at length succeeded in thrusting the end of his lance through the bars of his helmet, and wounding the captain in the forehead, who irritated on the occasion, immediately ran the assailant through the body with his lance, the lance remaining in the wound. He now attempted to draw his sword, but was unable, owing to his right arm being grievously wounded. The Indians, who perceived this, pressed in crowds upon him ; and one of them having given him a violent cut with a sword on the left leg, he fell on his face : on this they immediately

diately fell upon him. Thus perished our guide, our light, and our support. On falling, and seeing himself surrounded by the enemy, he turned towards us several times, as if to know whether we had been able to save ourselves. As there was not one of those who remained with him but was wounded, and as we were consequently in no condition either to afford him succour or revenge his death we instantly made for our boats, which were on the point of putting off. To our captain indeed did we owe our deliverance, as the instant he fell, all the islanders rushed towards the spot where he laid.

The Christian King had it in his power to render us assistance, and this he would no doubt have done; but the captain general, far from foreseeing what was about to happen when he landed with his people, had ordered him not to leave his *balanghay*, but merely to remain a spectator of our manner of fighting. His Majesty bitterly bewailed his fate on seeing him fall.

But the glory of Magellan will survive him. He was adorned with every virtue; in midst of the greatest adversity he constantly possessed an immovable firmness. At sea he subjected himself to the same privations as his men. Better skilled than any one in the knowledge of nautical charts, he was a perfect master of navigation, as he proved in making the tour of the world, an attempt on which none before him had ventured\*.

This unfortunate battle took place on the 27th April 1521, which fell on a Saturday, a day chosen by the captain himself, being that which he held most propitious to his enterprize. Eight of our men, and four of the Indians, who had received baptism, perished with him; and few of those who remained regained the ships without being wounded. The men who were in the boats attempted, when they saw us pushed, to assist us by firing the bombards, but the distance was so great from which they fired, that they did us more harm than to the enemy, who nevertheless lost fifteen men.

In the afternoon the Christian king, with our consent, caused to be intimated to the people of Matan, that if they would restore the bodies of our dead soldiers, and especially of our captain-general, we would give them whatever merchandize they required; but they answered, that they could not be induced by any consideration, to part with the body of a man like our chief, which they would preserve as a monument of their victory over us.

On learning the death of our captain, those who were left in the town to carry on trade, caused all their merchandize immediately to be transported on board. We then elected in his stead two governors, that is to say, Odoard Barbosa†, a Portuguese, and Juan Serano, a Spaniard.

Our interpreter, called Henry, the slave of Magellan, having been slightly wounded in the battle, made this a pretence for going no more on shore, where his presence was necessary for our service, and passed the whole day in idleness extended on his mat. Odoard Barbosa, commander of Magellan's ship, reprimanded him severely on the occasion, and told him, that though his master was dead he was still a slave, and that on our return to Spain, he would deliver him up to Donna Beatrix, the wife of

\* Magellan only made the circuit of half the globe on this occasion; but Pigafetta says with some reason, though not quite correctly, that he made the tour of the world, for the Portuguese were well acquainted with the remainder of the route from the Molucca islands to Europe by the Cape of Good Hope, and Magellan had already been at Malacca.

† Odoard Barbosa had already been to the Moluccas by the way of the Cape: he has given a very interesting account of the Indies. Ramusio, tom. i. p. 248. One of his companions also wrote a short account of this voyage. See the Introduction to this Work, par. xxiv.



Magellan ; he moreover threatened to have him beaten with rods, if he did not immediately go on shore for the service of the Squadron.

The slave hereupon arose, and seemed to hold no resentment for the reprimand and menaces of the commander. On landing he repaired to the Christian King, whom he told that we intended shortly to take our departure, and that, if his advice was taken, he might render himself master of all our vessels and merchandize. The King turned a favouring ear to his proposals, and conjointly they laid a plot against us. The slave then returned on board, and shewed greater activity and more understanding than we had ever noticed in him before.

On the morning of Wednesday, 1st May, the Christian King sent to our two governors, to inform them that he had prepared a present of precious stones for the King of Spain, and that he might deliver it into their hands, he begged them to come that day and dine with him, and bring with them some of their suite. They accordingly went, taking with them our astrologer, San Martino of Seville, and, of the different ships companies, as many as made up twenty four for the entire number of the party. I was not one on the occasion, my face being swollen by a wound I had received from a poisoned arrow on the forehead. Johan Carvajo and the provost, suspecting the Indians of entertaining some bad intentions, returned immediately to the ships ; it seems their suspicions arose from having seen the nobleman who had been miraculously cured, separate the almoner from the party.

Scarcely had they related thus much to us on board, ere we heard loud cries and moans. Heaving anchor immediately, we laid the vessels close in with the shore, and fired a number of shot at the houses. We then saw Juan Serano, whom they were leading, wounded and tied hand and foot, towards the shore. He entreated us to desist from firing, as otherwise, he said, he should be massacred. We enquired what had become of his companions and the interpreter, and learned that the former had all been murdered, and that the interpreter had taken part with the natives. He conjured us to ransom him with merchandize ; but Johan Carvajo, though his fellow-gossip, joined with others in refusing to treat for his release, and would not allow any of our boats to approach the shore. The reason for this conduct of Carvajo was, in case of the death of the two governors, the command of the Squadron devolved on himself. Juan Serano continued to implore the compassion of his fellow-gossip, by assuring him he should be massacred the instant we set sail ; and finding at length that all his entreaties were vain, he uttered deep imprecations, and appealed to the Almighty on the great day of judgment, to exact account of his soul from Johan Carvajo, his fellow-gossip. He was however disregarded ; and we set sail without ever hearing afterwards what became of him.

The island of Zubu is large ; it has an excellent port, with two entrances to it, the one on the west, the other on the north-east. It lies in ten degrees of latitude north, and in one hundred and fifty-four degrees of longitude from the line of demarcation. In this island it was, before the death of Magellan, that we obtained the first intelligence respecting the Molucca Islands.

## B O O K III.

*From our Departure from Zubu, to our leaving the Islands of Molucca.*

ON quitting the island of Zubu, we proceeded to an anchorage off the point of an island called Bohol, eighteen leagues distant from Zubu; and, seeing our crews were diminished so greatly by the losses we had sustained as to be no longer adequate to manning the three vessels, we determined on burning the Conception, after taking out of her whatever was serviceable. We then steered south-south west, coasting along an island called Panilongon, the inhabitants of which are as black as Ethiopians.

Continuing our course, we came to an island called Butuan\*, where we cast anchor. The King of the island came on board our ship, and, as a symbol of friendship and alliance, drew blood from his left hand, with which he besmeared his breast, and touched the tip of his tongue, a ceremony which we imitated. We then entered a river†, in which we saw a number of men fishing, who offered fish to the King. The King, like all the inhabitants of this and the neighbouring islands, was naked, wearing nothing but a piece of cloth which concealed his sex, which even he laid aside, as did the chiefs of the island who were with him; after which they seized their oars and began rowing, singing at the same time. We passed by a number of houses built on the side of the river, and at two hours after night-fall reached the King's house, which was two leagues distant from our anchorage.

When about to enter the house, we were met by a number of attendants carrying flambeaux made of canes and palm-leaves rolled up, and enclosing gum anime. While supper was preparing, the King, with two of his chiefs and two of his wives, who were tolerably pretty, emptied a large vase full of palm wine without eating. They invited me to drink with them, but I excused myself by observing, that I had already supped, and drank only once. In drinking they observed the same ceremony as the King of Massana. The supper was composed of rice, and fish highly salted, served up in China bowls. The rice they ate in lieu of bread. The manner in which they cook their rice is as follows: in an earthen pot, similar to our stew-pans, they first put a large leaf, which entirely covers the inside; in this they place the rice and water, and cover the pot; the rice is then suffered to boil till it attains the consistence of our bread, and is taken out in lumps. This is the manner in which rice is cooked in all the islands of these parts.

Supper ended, the King caused a mat of reeds to be brought in, with another of palm, and a pillow made of palm leaves. This was for my couch, on which I laid down to rest with one of the chiefs. The King went to rest in another apartment with his two wives.

The next day, before dinner, I made an excursion into the island; I entered several houses, which were built in the same manner as those before described in the islands we had previously visited, and in which I saw many utensils of gold, but few provisions. I afterwards rejoined the King, and dined with him on rice and fish.

I succeeded, by signs, in making the King comprehend that I wished to see the Queen, and in a similar manner he intimated his consent; we, in consequence, proceeded towards the summit of a mountain where was her abode. On entering I bowed to her,

\* A part of Mindanao.

† The river which forms the bay of Chipit.

and she returned the compliment. I sat beside her while she was employed in making mats of palm for a bed. Her house was handsomely furnished with vases of porcelain, which were suspended from the sides of the apartments, as were four gongs, one of which was very large, another of a middling size, and two others small. She had a number of slaves of both sexes to wait on her. We took our leave and returned to the King's house, and breakfasted on sugar-canes.

We found in this island hogs, goats, rice, ginger, and in short every thing we had seen on the others. What, however, most abounds is gold. Vallies were pointed out to me, in which, by signs, they made me comprehend there were more lumps of gold than we had hairs on our heads; but that, for want of iron, the mines exact greater labour to work than they feel inclined to bestow.

In the afternoon, on my requesting to go on board of ship, the King, with several chiefs of the island, offered to accompany me in their balanghay. As we fell down the river I saw on a small mount on the right three men hanging from a tree. On enquiring the reason of this, I learnt they were malefactors.

This part of the island, which is called Chipit, is a continuation of the same land as that on which Butuan and Calayan are situate: it stretches above Bohol and approaches Massana\*. The port is a tolerably good one. It is situate in eight degrees of latitude north, longitude one hundred and sixty-seven degrees from the line of demarcation, and is fifty leagues distant from Zuba. In the north-west lies the island of Luzon† two days sail away. This island is large, and every year there arrive at it six or eight junks from the people called Lequies, for the purpose of trafficking. I shall speak of Chipit in another place.

On leaving this island, steering west-south-west, we came to an anchor off an island almost a desert. The inhabitants, who are very few in number, consist of Moors banished from an island called Burné (Borneo). They go naked like the inhabitants of the other islands, and for their arms use sarbacanes‡ and arrows, for which they have quivers, that likewise serve to hold the herbs with which their arrows are poisoned. They also have poignards, their handles wrought with gold and precious stones, lances, clubs, and small breast-plates made of the buffalo's hide. They looked upon us as gods or faints. In this island the trees grow to a great size, but provisions are scarce. It is situate in latitude seven degrees thirty minutes north, and forty-three leagues from Chipit; it is called Cayayan§.

Leaving this island, and continuing the same course, that is to say west-south-west, we arrived at a large island, in which we found abundance of all kinds of provisions; this to us was fortunate, for we were so hungry and so badly provided with food, that we were several times on the point of abandoning our ships and establishing ourselves in some of these countries there to end our days. This island, which is called Palaoan§, furnished

\* This is the island Mindanao, which our author writes Maingdanao. In the chart of Billin, as in that of our manuscript, the ports of Chipit, Butuan, and Caligan are laid down; it extends beyond Bohol, and its northern point is contiguous to Massana.

† Luzon or Manila.

‡ Sarcabanes are hollow reeds used in Borneo and the neighbouring islands, through which the natives of the islands blow small poisoned arrows at an enemy. They are very expert in the use of them, and send an arrow to a considerable distance by the force of their breath. ENG. TR.

§ In table xviii of Urbano Monti, the island of Cayayau, surrounded by small islands, is marked as laying in a similar direction. It is in like manner laid down in the atlas of Robert.

§ In ancient charts Palaoan is placed north-west of Manila; this island could not consequently be in the route of our circumnavigator, for Manila is north-east of Cayayan. But in this course is seen the island

furnished us with hogs, goats, fowls, bananas of several species; some of these were a cubit in length and as thick as a man's arm; others were but a span in length, while others again, and these were the most excellent, were of still inferior size. It likewise produces cocoa-nuts, sugar-canes, and roots similar to turnips. They cook their rice in hot embers, placing it in canes or wooden bowls, and find, by this process, that it keeps much longer than when boiled in pots. From the same rice also, by means of an alembic, they extract a wine stronger and superior to palm wine \*. In one word this island was to us a land of promise. It is situate in latitude nine degrees twenty minutes north, longitude one hundred and seventy-one degrees twenty minutes from the line of demarcation.

We presented ourselves before the King, who contracted an alliance and friendship with us; and to convince us of his sincerity, he begged a knife of us, which he made use of for drawing blood from his breast, with which he touched his forehead and tongue. We repeated the same ceremony.

The inhabitants of Palaoan, like all the other people of these parts, go naked; but they are partial to wearing ornaments, such as rings, small chains of brass, and little bells. What, however, they are most delighted with is brass wire, to which they fasten their hooks for fishing.

Almost every individual cultivates his own lands. They use farbacanes and large wooden darts more than a span in length, headed with a harpoon; some of them have a fish-bone for a point, others a sharp piece of bamboo poisoned by means of a certain

island Paragua or Paragoia; and I see this same island called Palaoan on a globe four feet in diameter, belonging to the family of Cusani, in which I have had the happiness of living upwards of thirty years; and with pleasure I take this opportunity of publicly testifying my gratitude for the kindness I have experienced at their hands. This globe, as well as a celestial globe of similar dimensions, was made about the middle of the seventeenth century by Father Sylvestro Amangio Moroncelli di Fabriano, a Celestine monk. In the chart annexed to Macartney's Voyage, this island is denominated Palawan or Paragua, which proves that Palaoan or Paragua, or Paragoia, are only the same name or rather different names of the same island.

\* This is arrack. The still made use of by the natives of this island is not described, but it is likely to resemble that used in the simple but ingenious process of distillation common in various parts of continental India. A hole is dug in the ground suited to the size of the jar they employ for containing the fermented extract of the rice. With the bottom of this hole is a subterranean communication with the atmosphere to feed the fire with air, and in the side of the hole a chimney which serves as well to add fresh fuel by as for a chimney. A fire of dry wood is kindled in the hole, and when the ground is thoroughly heated the pot or rather jar is fixed in the hole, and earth placed about it so as to prevent the escape of heat. To the neck of the jar a pan is placed, with a hole in the middle to fit the neck of the jar, to which the pan is perfectly luted: this pan has the bottom of it lower at the circumference than at the hole in the middle, and near the top is covered with a thin sheet of tin or other metal, or with a shallow earthen pan with an extremely thin bottom, which serves in lieu of a worm and vat to condense the vapour as it ascends. To the bottom of the lower pan, where two are employed, a long piece of bamboo is luted, through which the vapour, condensed and formed into spirit, runs to a pitcher or vessel placed to receive it. Another piece of bamboo is luted into the bottom of the upper pan, or, where but one is used, communicating with the upper surface of the metal plate through which the liquor for cooling the vapour runs to the water vessel. This vessel is at first nearly filled with water. When the heat of the fire below begins to cause the fermented liquor in the jar to rise, an Indian with a pot or kettle pours a gentle stream of water from the vessel adjoining into the upper pan or on to the plate of tin, and continues to do this until the process is complete. The extreme cold excited by the evaporation of the water occasions the vapour which rises from the jar to be immediately condensed, and to run off through the pipe of bamboo to the receiver in a trickling stream; and the spirit which runs off thus is found to be at least as cold as that obtained by passing through the worm of the cooler of European distilleries. This cheap, ingenious, and truly philosophical process, so much superior to that in use in this country, might perhaps admit of such improvement as to cause it to supersede the necessity for and great expence of our present apparatus for distilling.

ENG. TR.—Communication of a proprietor in Bengal.

herb;

herb; these arrows are not trimmed at the end with feathers, but with a strip of very soft and light wood. To the end of the sarbacane they fasten an iron head when their arrows are expended, and use it as a lance.

They have likewise large tame cocks, which, from superstition, they do not eat; but which they keep for fighting; at mains of these birds considerable wagers are laid, and prizes are assigned to the owners of the conquerors.

From Palaoan, steering south-west, after sailing ten leagues, we fell in with another island. On sailing along its shores, it seemed to us to ascend\*. We coasted along it the space of fifty† leagues at least before we met with an anchorage. Scarcely had we anchored before a tempest arose. The sky was overcast, and we saw the light of Saint Elme settle on our mast.

The following day, 9th of July, the King sent to the vessels a handsome pirogue, the prow and poop of which were adorned with gold. On the prow was a blue and white pavilion, surmounted by a tuft of peacocks' feathers. In this pirogue were musicians who played on the bagpipe and drums, and with them a number of other persons. The pirogue, which is a kind of galley, was followed by two almadies or fishing-boats. Eight of the chief people of the island who were in the pirogue came on board our vessel, and took their seats on a carpet spread for the purpose in the hind-castle, where they presented us with a wooden vase full of betel arca, which they continually chew, together with orange flowers and jessamine: the whole was covered with a cloth of yellow silk. They likewise gave to us two baskets of fowls, two goats, three vases of distilled wine, and some sugar canes. To the other vessel they made a similar present, and after embracing us they went their ways.

The wine extracted from rice is as clear as water, but so strong that many of our crew were intoxicated with a very moderate use of the liquor. The name they give it is arach.

Six days after, the King sent three other pirogues beautifully ornamented, which were rowed round our vessels, the musicians on board playing all the while on the bagpipe, gongs, and drums. The people on board saluted us by taking off their caps, which are so little they scarcely cover the top of the head. We returned the salute with a discharge of our bombards, but without loading them with stones. They brought us several different dishes of rice, variously prepared, now in oblong pieces enveloped in leaves, now in the shape of a sugar loaf, and now made into cakes with eggs and honey.

After these presents on the part of the King, they informed us that he readily granted us permission to wood and water on his island, and that we were at liberty to trade to any extent with the inhabitants. On this intimation seven of us were dispatched with presents for the King, the Queen, and their ministers. The present for the King consisted of a Turkish dress of green velvet, a chair covered with violet-coloured silk, five yards of red cloth, a cap, a glass goblet gilt, and three quires of paper; that for the Queen consisted of three yards of yellow cloth, a pair of shoes embroidered with silver, and a silver etwee full of pins. For the chief minister we carried three yards of red cloth, a cap, and a glass goblet gilt; for the king at arms, or herald, who came with the pirogue, a Turkish dress of red and green cloth, a cap, and a quire of paper; for the seven other personages who came with him, we likewise took presents, some yards of cloth for example, a cap each, and a quire of paper. When all the presents were ready, we entered one of the three pirogues.

\* That is to say, move in a contrary direction, owing to the adverse currents.

† Fabre says ten leagues, and Ramusio five: our manuscript plainly expresses fifty, which is the real distance from the southern point of Paragoa to the city of Borneo.

On reaching the town we were forced to wait two hours in the pirogue for the arrival of two elephants covered with silk, and twelve men, each of which was the bearer of a vase of porcelain covered with silk, to hold our presents. We ascended the backs of the elephants, preceded by the twelve men who carried our presents, and in this manner proceeded to the house of the minister, who had a supper consisting of several dishes served up for us. We slept on mattresses stuffed with cotton and covered with silk, and for coverlids had Cambaian chintzes.

The next day we spent the morning idly at the minister's house; at noon we proceeded to the King's palace. We rode on the same elephants as brought us from the pirogues, preceded by the men who carried our presents. From the governor's house to the King's palace all the streets were lined with men armed with lances, swords, and clubs by special order of the King.

We entered the court of the palace on our elephants, where alighting, we ascended a flight of stairs accompanied by the governor and some officers: we afterwards were ushered into a large saloon full of courtiers, which we should denominate barons of the kingdom: here we seated ourselves on a carpet, and the presents were placed near us.

At the extremity of this saloon was another apartment, somewhat smaller, hung with silk, where two curtains of brocade pulled up, exhibited two windows which gave light to the apartment. We saw here three hundred of the King's guards armed with poignards, the point of which they rested on their thighs. At the extremity of this apartment was a large door covered by a curtain of brocade, which, as those of the windows, had been before was drawn up, and shewed us the King seated at a table with a small child, and chewing betel: behind him there were only women.

One of the courtiers then informed us that we were not allowed to address the King; but if we had any thing we wished to communicate to him we might deliver its substance to him; that he should then tell it to a courtier of higher rank, who would repeat it to the brother of the governor's, a minister who was in the small apartment, and who, by means of a farbacane fixed in a hole in the wall, would impart it to one of the principal officers about the King's person, to be by him reported to the King.

He informed us that we had to make three inclinations to the King, at the same time raising our hands joined together above our heads, and raising first the one and then the other leg. Having complied with these requisite ceremonies, we informed His Majesty that we were subjects of the King of Spain, who desired to live in friendship with him, and asked nothing farther than the liberty of carrying on a commerce with his island.

The King replied, that he was well pleased that His Majesty of Spain sought his friendship; and informed us that we were welcome to wood and water in his dominions, and to follow any traffic we chose.

We then presented to him the different things we had brought; and on each separate article being displayed, he made a slight movement of the head. To each of us was given brocade, with cloths of silk and gold, which were first laid on our left shoulder, and afterwards taken off to preserve for us. A breakfast of cloves and cinnamon was then placed before us, after which all the curtains were let down, and the windows closed.

All those who were in the King's palace had a cloth of gold tied round their waists to conceal their privities, poignards with golden handles, set with pearls and precious stones, and a number of rings on their fingers.

We now again mounted the elephants, and returned to the governor's house. Seven  
8 men

men, who bore the presents made us by the King, marched before us; and when we came to the governor's house, the present intended by his Majesty for each of us was, as before, laid on our left shoulder.

We afterwards saw nine men coming to the house where we were, each carrying a tray of wood, with on it ten or eleven bowls of porcelain, containing different kinds of meat, that is to say, veal, capons, fowls, pea-fowls, and others, with many kinds of fish; of flesh and fowl alone there were upwards of thirty different kinds.

We supped off the floor, seated on a mat of palm. After each mouthful, as was their custom, we sipped some of the spirit distilled from rice out of a porcelain cup, about the size of an egg. We likewise ate some rice and other articles, prepared with sugar, using golden spoons for the purpose, similar to those with us.

We slept in the same place we had done the night before; and in this apartment two wax flambeaux were constantly kept burning in silver candlesticks, and two large lamps supplied with oil, and with four different lights to each. Two men kept watch all night long to attend to them.

The next day we repaired to the sea shore, where we found two pirogues destined to carry us on board our ships.

The city is built in the sea, the King's palace and the houses of the principal persons excepted. It contains twenty-five thousand hearths, or families\*. The houses are built of wood upon large piles, to keep them from the water. When the tide rises, the women, who are the chief venders of necessaries, traverse the town in boats. In front of the King's palace is a large wall, built with bricks of great size, with embrasures, or rather port-holes, as in a fortress; and on the wall are mounted fifty-six bombards of brass, and six of iron: in course of the two days we passed in the city, they made several discharges from these guns.

The King, who is a Mahometan, is called Rajah Siripada. He is very corpulent, and may be about forty years of age. He is waited upon by women alone, the daughters of the chief inhabitants of the island. No one is allowed to address him otherwise than in the manner I have described, through a sarbacane. He has ten secretaries constantly employed on different matters of state, who write on a very thin epidermis of certain trees which is called chiritoles. He never leaves his palace upon any occasion other than to hunt.

On the morning of the 29th July we saw more than a hundred pirogues advancing towards us, divided into three squadrons, with as many tungulis, which is the denomination given to their small barks. As we were apprehensive of some treacherous attack, we immediately set sail, and that in such haste that we left one of our anchors. Our suspicions increased on paying attention to several large junks, which the day before had come to an anchor in the rear of our ships, and which made us fearful of being assailed from all sides at once. Our first care was to relieve ourselves from the junks, at which we fired and killed a number of those on board. We made prize of four junks; four others saved themselves by running on shore. In one of the junks taken by us was the son of the King of Lozon, who was the captain-general of the King of Burné, and who with his junks had come from subduing a large city called Laoë †, built on a point of the island opposite to Great Java. In this expedition he

\* This number appears to be exaggerated. At present it comprises no more than two or three thousand houses. Hist. Gen. des Voyages, tom. xv. p. 138.

† Laoë is not a city, but a small island off the southern point of Burné. Pigafetta not having been there, no doubt, misunderstood what was told him respecting it. AMORETTI. At the time Pigafetta wrote,



he pillaged the city on account of its inhabitants preferring obedience to the Gentile King of Java, and disowning the authority of the King of Burné.

Johan Carvajo, our pilot, without consulting us, restored the captain to liberty, having been induced to this measure, as we afterwards learnt, by a bribe of a large sum in gold. Had we retained this captain, the Rajah Siripada would no doubt have given any thing we might have required for his ransom \*; for he had rendered himself formidable to the Gentiles, who are perpetually at war with the Mahometan king.

In the port in which we were there is another city, inhabited by Gentiles, like that of the King of Siripada, built in the sea, and of much greater size than the capital of the Mahometan King. The King of the Gentiles is equally potent as his neighbour, but is not so ostentatious; nay, it appears probable that Christianity might with much facility be introduced in his country †.

The Mahometan King, on being informed of the damage we had done his junks, caused us to be informed by one of our people settled on shore for the purpose of trade, that his vessels had had no hostile intentions towards us, but were merely on their way to attack the Gentiles; in evidence of which some of the heads of these people who had been killed in battle were shewn us. We then sent word to the King, that if this was the case, he had only to send away the two men who were on shore with our merchandize, and the son of Johan Carvajo, but this the King refused. Thus was Johan Carvajo punished by the loss of his son (born in the Brazils), and whom he undoubtedly would have recovered in exchange for the captain-general, but for his avarice and thirst after gold. We retained on board sixteen of the chief men of the island and three women, whom we reckoned on transporting to Spain, with intention of presenting these latter to the queen; but Carvajo kept them for himself.

The Mahometans here go naked, like all the other inhabitants of this climate. They are very partial to quicksilver, which they take internally, regarding it not only as a remedy in different disorders, but also as a preservative of health. They adore Mahomet and follow his law, consequently they eat no pork. They wash their posteriors with their left hand, which they never use in eating; and when they void their urine, stoop for the purpose. Their faces they wash with the right hand; but they never rub their teeth with their fingers. They circumcise like the Jews. They never kill either goats or fowls, without first addressing the sun. They cut off the pinions of their fowls, and their feet, after which they sever them in twain. Never do they eat of any animal but such as is killed by themselves.

This island produces camphor, a sort of balsam which exudes by drops from between the bark and the wood of the tree: these drops are as small as particles of bran. If

wrote, there was most probably a considerable city. In the chart of the East Indies, published in 1709, by Moll, a city of this name is marked at the mouth of Fresh river, in lat. 4° S. long. 111° E. of London; and besides this, off the south-western point of Borneo the island Laoot or Laut, that to which Amoretti alludes. ENG. TR.

\* Upon no just grounds whatever could this captain have been retained. Carvajo certainly was guilty of great ingratitude in acting so hastily as he did, especially after the open and generous conduct of the King of Borneo towards the Spaniards. Pigafetta perhaps veils the real cause for their unprovoked hostility. The junks could not have anchored in the harbour without exciting enquiry on the part of the commander of the squadron; he would have learnt in consequence that they returned rich with the plunder of Laoë, and, mindful of his obligations to the Sovereign of the country, presumptively, then resolved by murder and piracy to make himself master of the wealth on board: the appearance of the fleet in this case will have furnished him with the flimsy pretence for following up his plan, which Pigafetta states. ENG. TR.

† The Portuguese introduced Christianity among them, which flourished until 1595. Sonnerat loco citato; where also he says, that the Mahomedans have obliged the Pagans to quit the sea shore, and retire to the mountains.

the camphor be exposed to the air it insensibly evaporates. The tree which produces it is called capor \*. Here also cinnamon grows, ginger, mirabolans, oranges, lemons, sugar-canes, melons, citrons, radishes, onions, &c. Among the animals are elephants, horses, buffaloes, hogs, goats, fowls, geese, crows, and many other birds.

It is said the king of Burné has two pearls as large as pullets' eggs, and so perfectly round that when placed on a polished table, they never remain at rest. When we carried him our presents, I made sign of my desire to see them, which he promised I should do; but this never came to pass. Some of the chiefs told me they knew of them.

The Mahomedans of this country have brass money perforated so as to string it. On one side it has four characters of the great King of China. This money is called pici †. In our commerce with the Borneans for a cathil of quicksilver, they gave us six china bowls. The cathil weighs two pounds ‡. For a quire of paper we received still more. A cathil of brass purchased a small vase of porcelain; and for three knives we obtained one of larger size: for a hundred and sixty cathils of brass we obtained a bahar (344 lbs. avoirdupois) of wax. The bahar is a weight equal to two hundred and three cathils. For eighty cathils of brass we purchased a bahar of salt; and for forty cathils of that metal a bahar of anime, a kind of gum used for paying of ships, for in this country they have no pitch. Twenty tabils make a cathil. The merchandizes most in request here are copper, quicksilver, cinnabar, glass, woollen cloths, linens, and, prized above all others, iron and magnifying glasses.

The junks we have before mentioned are their largest vessels. They are constructed in the following manner: the sides to within two spans of the dead work are of planking fastened one piece to another by wooden pins, and nicely finished: in the upper part they are formed of large bamboos, which project in a salient angle from the junk to form a counterpoise §. These junks will carry as great a burthen as our vessels. The masts are made of the same bamboos, and the sails of the bark of trees.

Having noticed a considerable quantity of porcelain at Burné, I made some inquiries respecting it. I learnt it was formed of a very white kind of earth, which is left for half a century under ground to refine, so that they hence hold as a proverb, that the father buries himself for the welfare of his son. It is pretended, that if poison be put into these vases of porcelain, they immediately break.

The island of Burné is so extensive, that it requires three months to sail round it. It lies in latitude five degrees fifteen minutes north, longitude one hundred and seventy-six degrees, forty minutes from the line of demarcation §.

On

\* The best camphor at present comes from Borneo. Hist. Gen. des Voy. loc. cit. p. 140.

† The pici or pice is the coin of smallest value current in the East Indies. It is as described made in China.

‡ The cathil of Batavia, in the island of Java, weighs 1,355 lbs. and decimals avoirdupois; it is of 16 tails, as in China; if the tail, or as Pigafetta calls it, tabil of Borneo, be equivalent in weight to that of Java, as the cathil consists of 20 tails in Borneo, the weight in English avoirdupois will be 1,694 lbs. In the Metrologie of Biernorod, Paris. 1803, the weight of the cathil of Java, Siam, Malacca, and Sumatra, are given. In the three first places it is nearly the same, viz. equal to 1,355 lbs. avoirdupois, but the cathil is only of 16 tails. Now 1,694 lbs. avoirdupois, the cathil of 20 tails, is equal to 1,878 lbs. of Barcelona, or nearly two Spanish pounds. The bahar of Borneo may be reckoned equal to 344 lbs. avoirdupois. ENG. TR.

§ This serves to balance the junk or keep it steady. The text does not actually state that the dead work extends from the sides of the junk, but allows the interpretation given, since the author states that it serves as a counterpoise. AMORETTI.

§ This is the latitude of the city of Borneo. The longitude is not exact, Borneo lying in 165°, 10' east of the line of demarcation. The Chevalier Pigafetta marked in his plan of the island of Borneo the distance from

On quitting this island, we retraced our course to seek a spot fit for repairing our vessels, one of which leaked greatly, and the other for want of a pilot, had struck on a sand bank near an island called Bibalen \*; but, thank God, we got it afloat again. We likewise ran a great risk of being blown up: a sailor after snuffing a candle, through inadvertence, threw the lighted wick into a case of gunpowder; but he drew it out again so quickly that the powder did not take fire.

On the way we saw four pirogues. We took one loaded with cocoa nuts destined for Burné; but the crew escaped to a small island. The three others avoided us by retiring behind some other islets.

Between the north cape of Burné and the island of Cimbonbon, in latitude eight degrees seven minutes north, we found a very commodious port for careening our ships; but as we were destitute of many things necessary for this purpose, it took us forty-two days to finish this work. Every one did his best, one taking one part, another a different one. What caused us most trouble was getting wood from the forests, as the whole country was covered with brambles and thorny bushes, and we were barefooted.

In this island there are very large boars. Of these we killed one as it was swimming from one island to another. Its head was two spans and a half in length, and its tusks very long †. Here also are crocodiles, which live on land as well as in the water, oysters and shell fish of every description, and turtle of a very large size. We caught two, the meat alone of which weighed, of the one, twenty-six, of the other, forty-four pounds. We likewise caught a fish, the head of which, resembling that of a hog, had two horns. Its body was clothed with a bony substance, and on its back was a kind of saddle, but not very large.

What to me seemed more extraordinary was to see trees the leaves of which as they fell, became animated. These leaves resemble those of the mulberry-tree, except in not being so long, their stalk is short and pointed, and near the stalk on one side and the other they have two feet. Upon being touched they make away; but when crushed they yield no blood. I kept one in a box for nine days; on opening the box at the end of this time, the leaf was alive, and walking round it: I am of opinion they live on air ‡.

On quitting this island, that is to say the port, we fell in with a junk coming from Burné. We made signal to it to lay to; but as it paid no attention to us, we pursued, took, and pillaged it. It had on board the governor of Pulaoan, with one of his sons and his brother, whom we obliged to pay for his ransom, within the space of a week, four hundred measures of rice, twenty hogs, a similar number of goats, and a hundred and fifty fowls. Not only did he give us all we required, but to these he added spontaneously cocoa-nuts, bananas, sugar-canes, and vases of palm-wine. In recompence for his

from the north point to the port at fifty leagues, and Laoë at the southern point of the island. Not having heard any other parts of it mentioned, he gave to the island the form of a triangle, and laid down the two cities on the bay of Borneo.

\* Now called Balaba.

† This is the *babirossa* (*Sus babirossa* Linn.) which has the faculty of swimming, and whose snout is armed with long tusks. See the description of this animal in the *Voyage par le Cap. de Bonne Esperance* et Batavia, a Samarang, a Macassar, a Amboine et a Surate; par Stavorinus, tom. i. p. 254, in which also its figure may be seen.

‡ Other travellers have seen similar leaves, and have examined them with greater attention. Some have fancied these leaves to be moved by an insect contained in them. *Hist. Gen. des Voy.* tom. xv p. 38; others have remarked that they are not really leaves, but a species of locust covered with four wings of an oval form, and about three inches in length, the upper ones of which bend in such manner the one over the other as to resemble perfectly a brown leaf with its fibres. *Stedman. Voyage to Surinam*, book ii

liberal

liberal demeanour we restored him part of his poniards and fustils, and gave him a standard, a dress of yellow damask, and fifteen yards of linen. To his son we made a present of a cloak of blue cloth, &c. His brother received a dress of green cloth. We, likewise, made presents to the people who were with them, so that we parted in a friendly manner.

We now steered to pass on a backward track between the island of Cagayan and the port of Chipit, our course being east by south, and our destination for the islands of Malucho. We coasted certain islets where we noticed the sea covered with herbs, notwithstanding it was here of very considerable depth : we seemed to be in another sea\*.

Leaving Chipit on the east, we discerned on the west the two islands Zolo† and Taghima‡, where, as is said, the finest pearls are fished. Here those were taken belonging to the King of Borneo, of which I have spoken ; the manner in which he obtained possession of them was as follows : This King had married a daughter of the King of Zolo, who one day told him that her father owned these two large pearls. The King of Burné, on hearing it, was anxious to have them, and one night he sailed with five hundred vessels full of armed men, seized on the person of his father-in-law and his two sons, and made the surrender of these two pearls the price of their liberation.

Keeping now a course east by north we passed by two villages called Cavit and Subanin, and sailed by an inhabited island called Motroripa, ten leagues from the islets which I have mentioned. The inhabitants of this island build no houses ; but constantly live in their boats.

The villages of Cavit and Subanin stand on the islands Bulnan and Caligan, in which the best cinnamon grows. Had we been able to remain there any time we might have loaded our vessel with that spice ; but we were unwilling to lose the favourable wind which then prevailed, for we had to double a point and pass some small islands which surround it. Sailing along we saw some islanders who came off to us, and gave us seventeen pounds of cinnamon for two large knives we had taken from the governor of Pulaoan.

Having seen the cinnamon tree I am enabled to give a description of it. It is from five to six feet high, and no thicker than one's finger. Never has it more than three or four branches : the leaf is similar to that of the laurel : the cinnamon we use is merely the bark of the tree, which is stripped off twice in the year. The wood itself even, and the green leaves have the same aromatic flavor as the bark. It is called by the natives *cainmana* (whence the name cinnamon is derived) from *cain*, which signifies wood, and *mana*, sweet.

Changing our course now for a north-easterly direction, we steered for a town called Maingdunao||, situate in the same island with Butuan and Calangan, our object in making which place was to obtain precise information respecting the site of the islands Malucho. Meeting a bignaday on our way, a bark resembling a pirogue, we determined on capturing it ; but as in effecting this we encountered resistance, we killed seven of

\* Stedman, in nearly the same latitude in the Atlantic Ocean, found the sea covered with herbage. AMORETTI. The French navigators met with the same phenomenon in the Pacific Ocean in Riedlé Bay. See chap. xiii. of the Voyage of Discovery to the Austral Regions by Peron, in this collection. The vegetable is the *fucus giganteus*, often from 250 to 300 feet long. ENG. Tr.

† Bellin calls it Jolo. Cook, Sooloo. ‡ Now Basilan.

|| Maingdunao is the same as Mindanao, a town on a lake of similar name with the island on which it stands.

the eighteen men she had on board. The prisoners were better made, and more robust than any we had hitherto seen. They happened to be certain chiefs of Maingdunao, and among them was the king's brother, who assured us he perfectly well knew the position of the islands of Malucho.

Upon the account we received from him we changed our direction to the south-east. We were then in latitude six degrees seven minutes north, thirty leagues distant from Cavit.

We were told that at a cape on this island near a river are hairy men, great warriors and excellent bowmen. They have daggers a span long, and when they make prisoners they eat the hearts of them raw with orange or lemon juice. They are called Benaïans\*.

We passed on our way four islands, Ciboco, Beraham, Batolach, Sarangani, and Candigar†. On Saturday 26th October, just after the close of day, we experienced a hurricane, during which we took in our sails, and prayed to God for protection. Hereupon we saw our three saints settle on our masts, who dispersed the darkness. They remained there upwards of two hours, Saint Elme on the main mast, Saint Nicholas on the mizen, and Saint Clare on the foremast. In gratitude for the favour they had done us, we vowed them each a slave, and accordingly made them an offering each of one.

Pursuing our course we entered a port about the middle of the island Sarangani, towards Candigar; we anchored here, near a collection of houses in Sarangani, where is abundance of pearls and gold. This port lies in latitude five degrees nine minutes north, fifty leagues distant from Cavit. The people are Gentiles, and go naked like the rest of the inhabitants of these latitudes.

We stopped a day here, and seized forcibly on two pilots to conduct us to Malucho. By their advice we steered south-south-west, and threaded eight islands partly inhabited and partly desert, which formed a kind of street. Their names are as follow: Cheava, Caviao, Cabiao, Cumunuca, Cabaluzao, Cheai, Lipan, and Nuza; at the end of this street we found ourselves opposite to a tolerably handsome island‡; but having a contrary wind we were unable to double the point of it, but all night long were constrained to be constantly tacking. On this occasion it was that the prisoners we had made at Sarangani jumped overboard and made their escape by swimming, together with the brother of the king of Maingdunao; but we learnt afterwards, that the son of this prince, not having been able to keep his seat on his father's back, was drowned.

Finding it impossible to double the cape of the great island, we passed to windward of it, by several small islands. This large island, which is called Sanghir, is governed by four kings, the names of whom are as follow: Rajah Matandatu, Raja Laga, Raja Bakti, and Raja Parabu. It lies in latitude three degrees thirty minutes north, twenty-seven leagues from Sarangani.

Continuing the same course, we passed by five islands called Chioma, Carachita,

\* Peraian is the southern cape of an island of similar name.

† In the chart of Bellin I find but two islands here, one of which is called Saranga. Sarangani is named in the note of the eighty-two islands, which in the year 1682 belonged to the King of Ternate. Hist. Gen. des Voyages, tom. xi. p. 17. This island has an excellent port for vessels to victual in.

‡ The islands mentioned here belong to the groupe, among which modern geographers place Kararotan, Linop, and Cabrocana, after which comes Sanghir, the tolerably handsome island noticed by our author. South-south-west of this island are many islets mentioned as he proceeds by Pigafetta. Cabiou, Cabaloufu, Limpang, and Nouffa, are mentioned in the list of islands which in 1682 belonged to the King of Ternate.

Para, Zangalura, and Ciau \*, the last of which is ten leagues distant from Sanghir. Here is seen a pretty large mountain, but of no great elevation. Its King is called Rajah Ponto.

We reached the island Paghinzara †, on which are three high mountains : its King is named Rajah Babintan. Twelve leagues east of Paghinzara we found, besides Talant, two small inhabited islands, Zoar and Mean ‡.

On Wednesday, 6th November, having passed these islands we distinguished four others, pretty lofty, fourteen leagues eastward of the last. The pilot, whom we had taken at Sarangani, informed us that these were the islands Malucho. We now returned thanks to God, and as a signal of rejoicing fired a round from all our great guns ; nor will it excite astonishment that we should be elated, when it is considered that we had been at sea now twenty-seven months all but two days, and had visited an infinity of islands in search of those we had now attained.

The Portuguese have given out that the islands Malucho are situate in midst of a sea impassable on account of shallows which every where abound, and the constant cloudiness and fogs to which the atmosphere is subject ; we however found the contrary, and never had we less than a hundred fathoms water all the way to the Malucho Islands themselves.

On Friday, 8th of November, three hours before sun-set we entered the port of an island called Tadore §. We came to an anchorage near the land, in twenty fathoms water, and discharged all our guns.

The next day the King came in a pirogue and made the tour of our ships. We went to meet him in our boats to express our thanks : he caused us to enter his pirogue, in which we seated ourselves by his side. He was seated under a parasol of silk, which perfectly shaded him. Before him were one of his sons, who bore the royal sceptre, two men, each holding a vase of gold with water to wash his hands, and two others with two small gilt boxes containing betre (betel).

He complimented us on our arrival, telling us that a long time back he had dreamt that some ships would arrive at Malucho from a distant country ; and that to be certain whether his dream was true he had consulted the moon, by which he found the vessels would actually arrive, and that it was as he expected.

He next came on board our ships, and we all of us kissed his hand. We conducted him towards the hind-castle, where, that he might not be forced to stoop, he refused to enter otherwise than through the opening at the top. There we caused him to be seated in a chair of red velvet, and threw over him a Turkish vestment of yellow velvet ; and the more strongly to mark our respect we seated ourselves opposite to him on the ground.

When he understood who we were, and the object of our voyage, he told us, that he himself and all his people would feel happy in the friendship of the King of Spain, and glad to be considered his vassals ; that he would receive us in his island as his own children ; that we might come on shore and remain there as safe as in our own houses ; and that as a token of his affection for the King our Sovereign, his island should no longer bear the name of Tadore but be called Castille.

\* In the Atlas of Robert there are here a number of small islands, among which are Regalarda and Siapi, names which bear a similitude to Zangalura and Ciau, or Siau. Sonnerat also speaks of this last. In the note of the islands of the King of Ternate appear Karkitang, Para, Sangalouhan, and Siau.

† Paghinzara, Tulaut, and Mahono are contained in the same note

‡ Zoar and Mean are in the same spots on which Robert has placed Saranbal and Meyan.

§ Now Tidor.

We then made a present to him of the chair on which he sat, and the dress he wore: we likewise gave him a piece of fine cloth, four yards of scarlet, a vest of brocade, a yellow damask cloth, some other Indian cloths of silk and gold, a very fine piece of Cambayan chintz, two caps, six strings of beads, twelve knives, three large mirrors, six pair of scissors, six combs, some glass goblets gilt, and other things. To his son we presented a piece of Indian cloth of silk and gold, a large mirror, a cap, and two knives. We likewise made presents to each of the nine personages who attended him, of a piece of silk, a cap, and two knives; and to the remainder of his suite, of each a cap, knife, &c. continuing our gifts till the King desired us to cease. He said he was sorry that he had nothing with which to present the King of Spain that was worthy of his acceptance but himself. He recommended us to moor our vessels near the houses, and authorized us, in case any of his people should attempt to rob us during the night, to fire at them. After this he departed highly satisfied with us; but on no occasion would he bend the head, notwithstanding we frequently bowed to him. On his departure we fired a salute from all our guns.

This King is a Moor, that is to say an Arab\*, about forty-five years of age, tolerably well made, and of handsome countenance. His dress consisted of a very fine shirt, the sleeves of which were embroidered with gold; from the waist to the feet he wore a loose drapery; his head was covered by a veil of silk, and over this veil he wore a garland of flowers. His name is Rajah Sooltaun Manzoor. He is an eminent astrologer.

On Sunday, 10th November, we had a second interview with the King, who enquired what our several appointments were, and what our pay; in which articles we satisfied his curiosity. He likewise begged us to favour him with a seal of the King and a royal standard; being solicitous, he said, that his island, as well as that of Tarenate†, over which he intended to place as sovereign his grandson, who was called Calanogapi, should henceforth be subject to the King of Spain, for whom he would for the future contend: moreover, he added, if he should be so unfortunate as to be overcome, he would in his own vessels proceed to Spain, and carry with him thither the royal signet and standard. He afterwards besought us to leave with him on our departure some of our people, whom he would hold more dear than all our merchandize, which would not, as he observed, so long remind him, as the sight of these Spaniards, of our monarch the King of Spain.

Remarking our solicitude to hasten the lading of our ships with cloves, he told us, that not having a sufficient quantity in the island in a dry state to answer our demand, he would fetch more from the island Bachian, where he trusted he should find the quantity we needed.

This day being Sunday we made no purchases. The sabbath of these islanders is Friday.

It will no doubt be pleasing to you, my lord, to receive information respecting the islands which produce cloves. These are five in number: Tarenate, Tadore, Mutir, Machian, and Bachian‡. Tarenate (Ternate) is the chief: the last King was sovereign of almost  
the

\* By Moor and Arab Pigafetta alike means Mahomedan.

† Now Ternate.

‡ It was formerly thought that cloves were only found in these five islands, properly called the Moluccas; but they were afterwards found in other islands, to which, on this account, the name of Moluccas was extended; so that at present are comprised under this name all the islands between the Philippines and Java. The Dutch, in order to monopolize the trade in cloves, endeavoured by force and stratagem to destroy all the clove trees in the islands not dependent on them, but did not succeed. Subsequent on the  
French



the whole of the other four. Tadore (Tidor), where we then was, has its own king. Mutir and Machian are independent republics; and when the Kings of Tarenate and Tadore are at war with each other, these two democratic states furnish soldiers to either party. The last of the islands is Bachian, which has its distinct sovereign. The whole of this district, in which cloves grow, is called Malucho (the Moluccas).

Upon our arrival at Tadore, we were told that eight months before a Portuguese died there, of the name of Francis Serano. He was captain-general of the King of Tarenate, who was at war with the King of Tadore. Serano obliged the latter to give his daughter in marriage to the former, and most of the male children of the chief people of Tadore as hostages;—by these means peace was effected. From this marriage issued the grandson of the King Calanopagi, of whom we have before spoken; but the King of Tadore never sincerely forgave Francis Serano, and swore to be revenged: in fact some years after this occurrence, when Serano repaired one day to Tadore to buy cloves, the King had poison administered to him in leaves of betre, and he survived but four days. The King wished to have him interred after the custom of his country; but three Christian domestics, which Serano had taken with him, resisted his intention. Serano, at his death, left a boy and girl yet infants, the issue of a marriage contracted by him in the island of Java. The whole of his property consisted, almost exclusively, in two hundred bahars of cloves (68,800lbs. avoirdupois weight).

Serano was an intimate friend of, and was even related to our unfortunate captain-general; and him it was who influenced him in undertaking this voyage: for while Magellan was at Malacca, he learnt from Serano that he was at Tadore, where a very advantageous traffic might be carried on. Magellan did not lose sight of this information, when Don Emanuel refused the small increase of pay he solicited of a testoon per month\*; a recompense which he thought his services to the crown had amply deserved. In revenge, therefore, for the denial of a request so moderate, he repaired to Spain, and proposed to His Majesty the Emperor a voyage to Malucho by a western course, which proposition was listened to, and originated the expedition on which we sailed.

Ten days after the death of Serano, the King of Tarenate, called Rajah Abuleis†, who had married the daughter of the King of Bachian, declared war against his son-in-law, and drove him out of his island. His daughter left then her exiled husband to mediate between her father and him, and while with her father for this purpose she administered poison to him, which took him off in the course of two days. At his death he left nine sons: Chechili-Momuli‡, Jadore-Vunghi, Chechilideroix, Ciliman-zoor, Cilipagi, Chialioochechilin, Catara-vajecu, Serich, and Calanogapi.¶

On Monday, 11th November, Chechilideroix, one of the sons of the King of Tarenate whom we have before mentioned, approached our vessel with two pirogues, in which were men playing on gongs. He was dressed in a robe of red velvet. We were afterwards informed that he had with him the widow and children of Serano. Still he did not venture to come on board; and on our part we dared not to invite

French revolution great changes took place in the South Sea. Pigafetta, who has given the Molucca Islands in his charts, has likewise delineated on one of them a clove tree, which bears no resemblance to it whatever. AMORETTI. As well as in the South Sea, the clove-tree flourishes in the Isle of France; as will be seen in the Voyage to the Isle of France and Manila, by M. de Guignes, which forms a part of this Collection.

\* The testoon of this time was of the value of half a ducat, or about five shillings.

† When Brito or Breo was sent as a governor to the Molucca islands in 1511, Abuleis was then sovereign of Ternate, and is called Rajah Beglif.

‡ It appears that when Pigafetta uses the *cb* it has, after the manner of the Italians, the sound of *k*, and not that of the *cb* of the English and Spaniards. ENG. TR.

him without permission from the King of Tadore, who was his enemy, and in whose port we were: we consequently sent to learn his pleasure. His answer was that we had full liberty to do as we pleased. In the mean time Chechilideroix, seeing us hesitate, became suspicious, and kept a greater distance, on which we were induced to send a boat to him, with a piece of Indian cloth as a present, some mirrors, scissars, and knives, which he accepted with reluctance, and afterwards sailed away.

He had with him an Indian who had turned Christian, and was called Manuel; this man was servant to Alphonso de Lorosa, who on the death of Serano had come from Bandan to Tarenate; he understood the Portuguese, and with the boat we sent came on board our vessel, and informed us that the sons of the King of Tarenate, though at enmity with the King of Tadore, were well inclined to abandon the King of Portugal for the monarch of Spain. By his means we conveyed a letter to Lorosa inviting him on board, and assuring him of our friendly intentions. In the sequel we shall see that he attended to our invitation.

On enquiry into the customs of the country, I learnt that the King may have as many women as he pleases, but that only one of them is regarded as his queen, the others being reckoned slaves. Without the town he had a large house, in which were two hundred of his most handsome women, with an equal number to wait upon them. The King always eats by himself, or with his queen, on a sort of elevated platform, which commands a view of all his women, who are seated round him; and after dinner he selects which of them pleases him best for his companion for the night. After the King has dined, provided he allows of it, his women all eat together; otherwise each dines in her chamber by herself. No one is allowed to see the King's women but by express permission from him; and were any daring individual to approach the place of their abode, whether by day or by night, he would instantly be put to death. In order that the King's seraglio may be well supplied, each family is obliged to furnish him with one or two girls. The Rajah Sooltaun Manzoor had twenty-six children; of which number eight were boys and eighteen girls\*. In the island of Tadore there is a kind of bishop†, who had forty women and a vast number of children.

On Tuesday, 12th November, the King caused a shed to be raised for receiving our merchandize, which was completed in a single day. Thither we carried all we designed to barter, and three of our men were set to guard the same. The value fixed on the merchandize we meant to exchange for cloves was thus fixed: for ten yards of red cloth of a fine quality, a bahar of cloves was to be received. The bahar is four quintals and six pounds‡, each quintal being one hundred pounds. We likewise were to have in barter the same quantity of cloves for fifteen yards of inferior cloth, for fifteen axes, or thirty-five glass goblets. After this ratio we disposed of all our glass to the King. Moreover, a bahar of cloves was the price given for seventeen cathils of cinnabar, for a similar weight of quicksilver, for twenty-six yards of linen, or twenty-five of a finer quality, for a hundred and fifty pair of scissars, or as many knives, for ten yards of Guzzerat cloth§, for three gongs, or a hundred weight of copper. We should

\* Forster (Cook's Third Voyage) observes that wherever men or even animals have many females, more of the feminine are born than of the masculine gender; a circumstance easy of explanation on the principle of the organic molecule of Buffon. The family of the King of Tidor is in proof of this assertion.

† That is to say a musti.

‡ It is not clear what pounds Pigafetta alludes to, whether Spanish or Portuguese; if the pound of Seville, the bahar of Molucca will be equivalent to four hundred and twelve; if of Lisbon to four hundred and ten dupois.

§ The Guzzerat was a kingdom in India, subject to the King of Cambaya, of which Barbosa, a companion of Pigafetta, makes mention in Ramusio, tome i. p. 295.

have made great profit of our looking-glasses, but most of them were broke by the way, and the residue were almost wholly appropriated to himself by the King. Part of the merchandize I have mentioned was taken out of the junks we captured. We thus carried on a highly advantageous traffic; but we should have made it still more lucrative but for our eagerness to return to Spain. Besides cloves, we every day laid in a considerable stock of provisions, the Indians constantly repairing to us in their barks, bringing goats, poultry, cocoa-nuts, bananas, and other edibles, which they gave us for things of little value. We at the same time laid in a large quantity of an extremely hot water, which after an hour's exposure to the air becomes very cold. It is pretended that this quality of the water is owing to its issuing from the mountain of cloves\*. In this we recognized the imposture of the Portuguese, who have studied to enforce a belief that there is no fresh water in the Malucho Islands, and that it must be obtained from very distant countries.

The next day the King sent his son Mossahap to the island Mutir in search of cloves, that we might the sooner complete our lading. The Indians, who we had taken on the way, chose this opportunity of speaking to the King, and of interesting him in their behalf. He accordingly begged them of us, in order, as he said, that he might send them home, accompanied by five of the islanders of Tadore, who by this means would have an opportunity of speaking in praise of the King of Spain, and thus render the Spanish name dear to and respectable among those nations. We delivered up to him in consequence the three women we intended to present to the Queen of Spain, as well as all the men we had taken, those only of Burné excepted.

The King begged of us another favour: it was that we would kill all the swine we had on board, for which he offered us ample compensation in goats and poultry. We accordingly complied with his request, and killed them between decks that the Moors might not see them; for such is their abhorrence of this animal, that when by chance they meet one they shut their eyes and put their fingers to their nose, that they may neither see it nor smell the odour it diffuses.

The same evening the Portuguese, Peter Alphonso de Lorosa, came on board our vessel in a pirogue. We were informed that the King had sent to admonish him previously, that, though he was from Tarenate, he must take especial care, as he should answer for a different conduct, to be sincere in his replies to the questions we might put to him. In fact, on his coming on board, he gave us information on every matter interesting to us. We learnt from him that he had been sixteen years in India, of which he had passed ten in the Malucho islands, whither he had come with the first Portuguese, who had actually been established there that space of time, though this was kept a profound secret. He added, that a large vessel, eleven months before, had arrived at the Malucho Islands from Malacca, to load with cloves, and had effectively taken in a cargo; but that it had been detained for several months by bad weather at Bandan. This vessel came from Europe; and the Portuguese captain, who was called Tristan di Menèzes, told Lorosa, that the most important news at that time was that a squadron of five vessels, under the command of Fernandez Magellan, had sailed from Seville, to make the discovery of Malucho in the name of the King of Spain; and that the King of Portugal, who was the more vexed at this expedition from its being a subject of his who fought to do him the injury, had sent vessels to the Cape of Good

\* It has been remarked that many islands of the South Sea are volcanic; consequently the hot water is merely a result of this circumstance, or the existence of pyrites in the subterranean channels through which the water runs previous to its rising to the day.

Hope, and to Cape Sta. Maria \* in the country of the cannibals, to intercept his passage into the Indian Sea, but that they had not met with him. Having received information of his passing by another sea, and that he was gone to the Malucho islands by a western passage, he had ordered Don Diego Lopez de Sichera †, his captain-in-chief in the Indies, to send six ships of war to Malucho against Magellan; but Sichera being informed that the Turks were at this time preparing a fleet against Malacca, had previously been obliged to dispatch sixty ships against them to the Strait of Mecca, in the land of Judah ‡; and having found the Turkish galleys here cast on shore near the strong and handsome town of Adem, they succeeded in burning them all. This expedition prevented the Portuguese captain-general effecting what he was ordered against us; but shortly after he prepared a galeon of two tier of bombards to attack us, commanded by Francis Faria, a Portuguese. Neither did this galeon proceed to the Malucho Islands against us; for, whether owing to running on the shoals near Malacca, or to currents and contrary winds, it was obliged to return to the port whence it came. Lorosa added, that a few days before, a caravella with two junks had come to the Malucho Islands to obtain intelligence respecting us. The junks went in the interval to Bachian to load with cloves, having seven Portuguese on board, who, notwithstanding the remonstrances of the King, refusing to respect the persons either of the women or the inhabitants, nay, or the King himself, were all of them massacred. On learning this, the captain of the caravella judged expedient to sail as quickly as possible, and return to Malacca, leaving the two junks at Bachian, with four hundred bahars of cloves (between seventy and eighty tons), and a sufficiency of merchandize to barter for a hundred more.

He likewise told us that a number of junks go every year from Malacca to Banda, to buy mace and nutmegs, and thence come to the Malucho islands to load with cloves. The voyage from Banda to the Malucho islands is effected in three days, and that from Banda to Malacca in a fortnight. This commerce is the most profitable to the King of Portugal of any carried on with these islands, and in consequence the greatest care is used in keeping it secret from the Spaniards.

What Lorosa communicated was very interesting to us; we therefore endeavoured to persuade him to embark with us for Europe, holding out to him the expectation of some valuable appointment from the King of Spain.

On Friday, 15th November, the King told us he was about to proceed to Bachian to take possession of the cloves left there by the Portuguese, and requested presents of us for the King of Mutir, to whom he meant to give them in the name of the King of Spain. He amused himself in the interval of their preparation, while on board our ship, in seeing the exercise of our different arms, that is to say, the cross-bow, the berfil §, a weapon larger than the fusil, and the musket. He shot thrice from the cross-bow, but could not be induced to fire the musket.

Opposite to Tadore is a very large island called Gialilolo ||, inhabited by Moors and Gentiles. The Moors have two kings, one of whom, as we were informed by the

\* The northern cape of the Rio della Plata.

† Boismelé, Histoire de la Marine, says that Lopez de Sichera went to the Indies in 1593.

‡ Rather Jedda on the Red Sea, a port through which the commerce of Mecca is carried on. This account relates to the unfortunate expedition which Solyman the Magnificent undertook, at the instigation of the Venetians, against the establishments of the Portuguese in the Indies, to bring back to the Red Sea the commerce which the navigation round the Cape of Good Hope of the Portuguese had annihilated. The Venetians furnished the Ottoman for this purpose with the requisite timber for building the ships, and the artillery. (Robertson, Disquisition on Ancient India, sect. iii.)

§ The berfil is a large kind of cross-bow.

|| Gilolo.

King of Tadore, had six hundred, and the other five hundred and twenty-five children. The Gentiles have not so many wives as the Moors, nor are they so superstitious. The first thing they meet in the morning is the object of their adoration during the day. The King of the Gentiles is called Rajah Papua: he is very rich in gold, and inhabits the interior of the island. Here are seen, growing among the rocks, reeds as large round as a man's leg which are full of excellent water\*; of these we purchased a number. The island of Gialolo is so large that a boat with difficulty can make the tour of it in four months.

Saturday, 16th November, one of the Moorish Kings of Gialolo came, with a number of boats, on board our vessel. We made him a present of a green damask vestment, two yards of red cloth, some looking-glasses, scissors, knives, combs, and two glass goblets gilt, which much delighted him. He told us very politely that as we were friends of the King of Tadore he esteemed us also as his friends, since he loved that monarch as dearly as his own son. He invited us to visit his country, assuring us we should be treated with great distinction. This King is very powerful, and much respected in all the neighbouring islands. He is of great age, and is called Jussu.

The next morning, Sunday, the same King made us a second visit, and wished to see the manner in which we fought and discharged our bombards; at the exhibition we made in consequence of his request, he appeared to be greatly pleased, for in his youth he had been of a very martial disposition.

The next day I went on shore to see the clove-tree, and notice the manner in which it fruits; the result of my observations was as follows: the clove-tree attains a pretty considerable height, and its trunk is about as large as a man's body, varying more or less according to its age. Its branches extend very wide about the middle of the trunk, but at the summit terminate in a pyramid. Its leaf resembles that of the laurel, and the bark of it is of an olive colour. The cloves grow at the end of small branches, in clusters of from ten to twenty; and the tree, according to the season, sends forth more on one side than the other. The cloves at first are white; as they ripen they become reddish, and blacken as they dry. There are annually two crops gathered, the one at Christmas, the other about St. John the Baptist's day, that is to say about the time of the two solstices, seasons in which the air is more temperate in this country than at the other periods of the year, though the hottest of the two is that of the winter solstice, when the sun is here at its zenith. When the year is hot, and the quantity of rain that falls is little, the amount of the crop of each island is from three to four hundred bahars†. The clove-tree grows only on the mountains, and dies if transplanted to the plain‡. The leaf, the bark, and the woody part of the tree, have as strong a smell and a flavour equally potent with the fruit itself. If this last be not gathered just at the proper season it becomes so large and so hard that no part of it remains good but the rind. There are no clove-trees of prime quality but in the mountains of the five islands of Malucho; for though some grow in the island of Gialolo, and on the islet Mare between Tadore and Mutir, the fruit of them is inferior. It is said that fogs give them their superior degree of perfection in these islands; however this may be, we certainly did remark every day that a fog, resembling thin clouds,

\* The bamboo, a reed which naturally contains a liquor very good to drink.

† From fifty-five to seventy-three tons for each island, or for the whole five, from two hundred and seventy-five to three hundred and fifty-five tons; an amazing quantity certainly, but not more than adequate to the consumption of Asia, Europe, and America, which are supplied even now chiefly from these islands with cloves. ENG. PR.

‡ The Dutch have since found that they succeed equally well in the plain.

enveloped first one and then another of the mountains of these islands. Each inhabitant possesses some clove-trees, which he attends to himself, and the fruit of which he gathers, but he uses no species of culture. In different islands cloves bear different names: they are called bongalavan at Sarangani, at Tadore ghomodes, and in the residue of the Malucho islands, chianche.

This island likewise produces nutmeg-trees\*, which resemble our walnuts as well in the appearance of the fruit as in the leaves. The nutmeg when gathered is like a quince in shape, colour, and the down with which it is covered, but it is smaller. The outward husk is of the same thickness as the green one of the walnut; beneath, a thin membrane or tissue envelopes the mace, which, of a very lively red colour, incloses the ligneous shell containing the nutmeg.

Ginger also grows on this island; in a green state it is eaten in the same manner as bread. Ginger is not, properly speaking, the produce of a tree, but of a sort of shrub, which shoots up suckers about a span in length, similar to the shoots of canes, the leaves, too, like those of the cane, except in their being more narrow. These shoots are of no value, the root only being the ginger used in commerce. Green ginger is not so strong by much as when dried; and to dry it lime is used, for otherwise it could not be preserved.

The houses of these islanders are built in the same manner as those of the neighbouring islands, but they are not raised so high from the ground, and are surrounded with canes so as to form a hedge.

The women of the country are ugly: they go naked, as the females in the other islands, merely covering their sexual parts with a cloth made of the bark of trees. The men in like manner go naked; and, notwithstanding the ugliness of their wives, are very jealous of them. They were especially very angry at seeing us land with our brayettes† open, as they were apprehensive this mode of dress might act as a provocative to their women. Men and women alike go unshod.

They make their cloths from the bark of trees in the following manner. They take a piece of bark and soak it in water until softened; they then beat it with sticks, to make it stretch to the length and breadth they think proper; after which it resembles a piece of raw silk, with the membrane interlaced beneath as if it was woven‡.

Their bread is thus made from the wood§ of a tree which resembles the palm. They take a piece of this wood, and after clearing it from certain black and long thorns, pound it, and make it into a bread they call fagou. Of this bread they lay in store when they go on voyages.

The islanders of Ternate came every day to us in their boats to offer us cloves; but as we expected others from Machian, on the return of the King, we refused to buy of the other islanders, at which those of Ternate were much hurt.

On Sunday night, 24th November, the King returned to the sound of gongs, and passed between our vessels. We saluted him, to shew our respect, with several discharges of bombards. He informed us that, in consequence of orders he had given,

\* *Myristica officinalis*. Linn.

† This has reference to the slit dresses anciently worn by the Spaniards.

‡ At the present day a sort of cloth is manufactured, in the manner here described, from the bark of trees; an account of which may be seen in Cook. (First Voyage, book ii.)

§ It is not of the wood but of the pith of the todda-panna of the hortus malabaricus that fago is prepared. In the Molucca Islands the tree is called landan; it is of the palm species: of the down of its leaves a cottony cloth is made; its fibres serve for making cordage; its leaves to cover houses; like other palms it yields wine; and its pith the nourishing fago. ENG. TR.

we should have, in the four succeeding days, a considerable quantity of cloves. In fact, on Monday we had brought to us a hundred and seventy-one cathils\*, which were weighed without deducting the tara, or tare, allowed on buying for the consequent diminution of the weight of spices when taken fresh. These cloves sent by the King being the first we took on board, and forming the chief object of our voyage, we discharged several guns as a signal of rejoicing.

On Tuesday, 26th November, the King came to pay us a visit; and told us he had done for us, in leaving his island, what none of his predecessors had ever done for any one before; but that he had resolved on giving this mark of friendship to the King of Spain and to us, that we might the sooner complete our cargoes and proceed home, and the sooner return with additional forces to revenge the death of his father, who had been killed in an island called Baru†, and whose corpse had been cast into the sea. He added, it was customary at Tadore, when a vessel received the first part of her cargo of cloves, for the King to give an entertainment to the sailors or merchants of the vessels, and offer up prayers for their happy return. He, at the same time, intended to give a feast in honour of the King of Bachian, who, with his brother, had come to pay him a visit; and for that purpose he had caused the streets and highways to be swept clean.

This invitation generated suspicion, and this the more from our learning that at the spot where we took took in water three Portuguese had been murdered a short time before by islanders concealed in a neighbouring wood. Moreover the inhabitants of Tadore were frequently seen conversing with the Indians whom we had made prisoners; hence, notwithstanding a difference of opinion among us, some feeling inclined to accept the invitation of the King, the remembrance of what had happened at the fatal feast of Zubu prevailed in causing us to decline being of the party. We, however, sent to return our thanks for his civility to the King, and to excuse our non-attendance on the occasion, beseeching him to repair as soon as possible on board our ships, that we might deliver to him the four slaves we had promised, as we intended to sail the first fine weather.

The King came on board the same day, without the least symptom of mistrust. He said he came among us as into his own house; and assured us he felt very much hurt at a departure so sudden and so unusual; as vessels in general are thirty days in taking in their cargoes, though we had completed ours in so much less time. He added, if he had assisted us, even by the unprecedented step of leaving his own island, to hasten our lading with cloves, he had no intention thereby of precipitating our departure. He afterwards noticed that this was not a fit season to navigate these seas on account of the shallows near Banda; and admonished us of the probability there existed at this instant of our meeting with vessels of our enemies the Portuguese.

When he saw that all he had said failed of its effect, "Very well then," added he, "I shall return you the presents made me in the name of the King of Spain; for if you depart without allowing me time to get ready the presents suitable to the dignity of your King, which I am now preparing, all the kings my neighbours will esteem the Sovereign of Tadore one of the most ungrateful of men, in accepting favours from a monarch so powerful as that of Castille, without making a return. They will further say that you went away in this hurry merely from apprehension of some treachery on my part, and thus shall I be stigmatized for the remainder of my life with the odious

\* Most probably this should be bahars instead of cathils.

† Booroo, of which more will be said in course of the narrative.



name of traitor." After this speech, to remove all suspicion of his good faith, he caused the koran to be brought to him, devoutly kissed it, and placed it four or five times on his head, uttering lowly certain words, which were an invocation called *Zambihan*. Then, in the presence of us all, he observed aloud, that he swore by Allah (God) and the koran which he held in his hand, that he would constantly remain a faithful friend of the King of Spain. He delivered the whole of this harangue almost with tears in his eyes, and in such an affecting manner that we were induced to procrastinate our stay at Tadore a fortnight longer.

We then delivered him the King's seal and the royal standard. We were afterwards informed that some of the chiefs of the island had advised him to massacre the whole of us, and thus ingratiate himself with the Portuguese, who would be able to assist him better than the Spaniards, in revenging himself on the King of Bachian; but the King of Tadore, faithful and loyal, repelled the proposal with indignation.

On Wednesday, 27th, the King caused an advertisement to be published, bearing that any one was at liberty to sell us cloves, which afforded us an opportunity of purchasing a great quantity.

Friday, the King of Machian arrived at Tadore with several pirogues; but he would not go on shore, as his father and brother, banished from Machian, had taken refuge on that island.

Saturday, the King of Tadore came on board our vessel with the governor of Machian, his nephew, of the name of Iloomai, about twenty-five years of age; and learning that we had no more cloth remaining, he generously sent home for and gave us three yards of a red colour, to enable us, with the addition of some other articles, to make a present to the governor, worthy of his rank; this we did; and on their departure saluted them with our artillery.

On Sunday, 1st December, the governor of Machian took his leave; we were informed that, besides what we had given, the King had likewise made him presents, to induce him to expedite the sending us cloves.

On Monday the King undertook another voyage with a similar purpose to the preceding.

Wednesday being the festival of St. Barbe, and at the same time that we might shew respect to the King who had now returned, we fired a general salute from our great guns, and in the evening exhibited fire-works, with which the King was extremely delighted.

On Thursday and Friday we purchased a large quantity of cloves, which were afforded us at a low rate on account of our being near the time of our departure. We received a bahar (four hundred and ten pounds) for a few yards of ribband, and a hundred pounds weight for a few small chains of brass, which only cost a marcel \*. And as every sailor was anxious to carry to Spain as much as he could, every one bartered his property for cloves.

Saturday, three sons of the King of Tarenate with their wives, who were daughters of the King of Tadore, came to our ships. The Portuguese, Pedro Alphonso de Lorosa, was with them. We made a present of a glass goblet gilt to each of the brothers, and gave to the three women scissars and other trifles. We likewise sent some trinkets to another daughter of the King of Tadore, widow of the King of Tarenate, who objected to coming on board our ship.

\* The marcel is a small Venetian coin, struck by the Doge Nicolo Marcello, in 1473, and worth about five-pence sterling.

Sunday, being the day of the Conception of the Virgin Mary, we fired, in order to celebrate the same, a number of bombards, threw several shells, and let off many rockets.

On Monday, the 9th, the King came on board our ship with three of his women, who carried his betre. I must here observe that kings and the members of the royal family alone have the privilege of taking their wives abroad with them. The same day the King of Gailolo came a second time to see us exercise our guns.

As the day fixed for our sailing drew nigh the King was frequent in his visits, and it was very visible that he felt great concern on the occasion. He told us among other flattering things that he was like the suckling about to lose its mother's breast. He begged of us some berfils for his defence.

He counselled us not to navigate during the night on account of the shallows in these seas; and on our informing him that we intended to sail by night as well as by day in order the sooner to arrive in Spain, he replied, in that case, he could do nothing better than pray himself, and cause prayers to be offered up to the Almighty for the success of our voyage.

In the mean time Pedro Alphonso with his wife came on board our vessel bringing with him all his effects to return with us to Europe. Two days after Chechilideroix, son of the King of Tarnate, came in a boat well manned, and invited him on board; but Pedro Alphonso, who suspected him of some bad intention, declined compliance with his invitation, and at the same time advised us not to suffer him to enter our ships, which counsel we followed. We afterwards were informed that Chechilideroix, being on very friendly terms with the Portuguese captain of Malacca, had formed a plan to seize Pedro Alphonso, and deliver him into his custody. When he found himself prevented, he grumbled much, and threatened to punish those with whom Lorofa had lodged, for suffering him to leave the island without permission from him.

The King had informed us that the King of Bachian was about to make him a visit, with his brother who was to marry one of his daughters, and intreated us to honour their arrival with a salute. In fact on the 15th December he arrived, and we did as requested, not firing however the guns of largest calibre, on account of the heavy lading we had on board.

The King of Bachian with his brother, designed for the husband of the daughter of the King of Tadore, came in a large galley with three tier of rowers on each side, in all a hundred and twenty. The vessel was adorned with several pavillions formed of parrots' feathers, yellow, red, and white. As it sailed along the rowers' beat time with their oars to the music of gongs and other instruments. In two boats were the young girls to be presented to the bride. They saluted us by making the tour of the vessel and the port.

As etiquette forbids one king setting foot on the territory of another, the King of Tadore paid a visit to the King of Bachian in his galley. The latter, on seeing the King arrive, rose from the carpet on which he was seated in order to give him the seat of honour, but the visitor from civility declined the distinction and seated himself beyond, leaving the carpet between. The King of Bachian then tendered five hundred patolles as a sort of compensation for the wife to be bestowed on his brother. These patolles are cloths of silk and gold, manufactured in China, and much sought after in these islands. In barter for each of them three bahars of cloves, more or less, are given according to the quantity of gold on the cloth and the value of the workmanship. At the death of any of the chiefs of the country, the parents wear these clothes.

On Monday, the King of Tadore sent a dinner to the King of Bachian carried by fifty women drest in garments of silk extending from the waist only to the knees. They marched two and two with a man between them. Each of them carried a large dish in which were small plates containing different ragouts. The men carried wine in large vases. Ten of the oldest women performed the office of mistresses of the ceremony. In this order they proceeded to the vessel and presented the whole to the King who was seated on a carpet beneath a red and yellow canopy. On their return the women fastened on some of our people whom curiosity induced to be present on the passing of the procession, and who were unable to release themselves until they had made them some trifling presents. The King of Tadore next sent provisions to us, consisting of goats, cocoa-nuts, wines, and other edibles.

The same day we hoisted a new set of sails on which were painted the cross of St. Iago de Compostella, with this inscription: QUESTA E LA FIGURA DELA NOSTRA BUENA VENTURA\*.

On Tuesday, we presented to the King some of the musquets we had taken from the Indians when we seized their junks, together with some berfils, and four barrels of gunpowder.

On board each of the vessels we shipped eighty tons of water; we had to take in wood afterwards at the island of Mare, near which our course laid, and where the King had sent a hundred men to get us a stock in readiness.

The same day the King of Bachian received permission from the King of Tadore to come on shore to contract an alliance with us. He was preceded by four men who carried each a poignard raised in their hands. He declared, in presence of the King of Tadore and all his suite, that he should ever be ready to devote himself to the service of the King of Spain; that he would reserve for him alone the cloves which the Portuguese had left in his island until another Spanish Squadron should come to take them on board, and would dispose of them to no other person without his consent; and that he should send him, by us, a slave and two bahars of cloves: he would indeed have sent ten, but our vessels were so deeply laden they could take no more on board.

He likewise presented for the King of Spain two beautiful dead birds. They were of the size of a thrush, with a small head, long beak, legs of the length of a span, and thick as a writing pen: the tail of these birds resembles that of the thrush also; and they have no wings like other birds, but, instead, long feathers like tufts of different colours: the whole of the feathers, those only excepted which are in lieu of wings, are of a dull colour. This bird never flies but when it blows. It is said to come from the terrestrial Paradise, and is called bolondilallah, that is to say, the Bird of God †.

The King of Bachian appeared to be seventy years of age. A very strange matter was related to us concerning him: whenever about to combat his enemies, or to undertake any thing of importance, he previously submitted himself twice or three times to the enjoyment of one of his servants, destined for this purpose, in the same manner as, according to Suetonius, Cæsar was wont to submit himself to Nicodemus.

One day the King of Tadore sent to advise the people who kept the warehouse in which our merchandize was lodged, not to leave their home during the night, because,

\* This is the image of our good fortune.

† Pigafetta is possibly the first who undeceived the Europeans respecting the bird of Paradise, (*avis paradisiaca*, Linn.) which previous to his relation was believed to have no legs or feet, (on account of their being cut from all that came to Europe;) and so strongly did this opinion prevail, that the great naturalist Aldrovandus (*De Avib.* book i. p. 807.) condemns our author for attributing legs and feet to them; Aldrovandus also gives a representation of the bird without them.

as he observed, there were islanders who, by means of certain ointments, assumed the figure of men without heads, and who, if they chanced to meet any one they disliked, laid hold of them by their hand and anointed the palm of it with their unguents, in consequence of which the person so anointed became ill and died in three or four days time. Whenever they meet with three or four persons together, they do not touch but possess the art of stupifying them. The King added that he found it requisite to keep watch for them, and that he had already caused many of them to be hung.

Before any new house is inhabited it is customary to surround it with a large fire, and give several entertainments; afterwards a specimen of every good thing produced in the island is fastened to the roof, and the people are then persuaded that the person about to dwell in the house will never know want of any thing.

By Wednesday, in the morning, every thing was made ready for our departure. The kings of Tadore, Gailolo, and Bachian, as well as the son of the King of Tarenate came to accompany us as far as the island of Marc. The ship *La Vittoria* sailed first, and stood out for sea awaiting the *Trinidad*; but this vessel was a long time in raising the anchor, and when this was effected the sailors perceived she leaked fast in the hold. The *Vittoria* then returned to her anchorage. Part of the cargo of the *Trinidad* was unshipped, to allow of searching for and stopping the leak; but notwithstanding for this purpose the vessel was laid on her side, the water still entered rapidly, as from a spout, but the leak could not be found. The whole of this and the next day the pumps were kept going but without the least success.

Upon intelligence of this, the King of Tadore came on board to assist us in discovering the leak, but his efforts in this view were ineffectual. He ordered five divers, accustomed to remain a long time under water, to examine the ship externally: they continued under water more than half an hour, but could not find the leak; and as, notwithstanding the pumps were kept continually going, the water still increased on us, he went to the other side of the island for three men capable of keeping a longer time under water than those who had dived before.

The next morning early he returned with them. These men dived into the sea, with their long hair loose, in expectation that the water streaming through the leak, by bearing their hair with it would point out the spot\*; but after an hour spent under water, in a vain search, they came up again to the surface. The King seemed much affected at this misfortune, so much so indeed, that he offered to go himself to Spain to acquaint the King with what had befallen us; but we informed him, that as we had two vessels we might complete our voyage in the remaining one, which however must sail shortly, to take advantage of the east winds which then began to blow; that in the mean time the *Trinidad* might be careened, and afterwards under favour of the west winds reach Darien, which is on the other side of the sea, in the land of Diucatan†. The King then remarked that he had two hundred and fifty shipwrights, who should be employed in refitting the vessel under direction of our people; and that such of our crews as remained for the purpose should be treated as his own children. This promise he made in a manner so truly affecting, as to draw tears from our eyes.

\* This might have happened; the floating hair, if the divers had been near the spot, by being drawn to the leak would have pointed it out. At present hards of hemp are put into a sail, which is passed under the ship's bottom; the water carries these hards with it through the chinks or holes, and thus designates the leak.

† Yucatan in America, near the Gulf of Mexico, where is the Isthmus of Darien. This vessel, however, remained at Tidor, and became prize to the Portuguese. (*Hist. Generale des Voyages*, tome xiv. p. 99.)

We who were on board the *Vittoria*, apprehensive of her being too heavily laden, which might occasion her foundering at sea, determined on landing sixty quintals of cloves, and caused them to be transported to the house in which the crew of the *Trinidad* were lodged. Some of our party, however, resolved on remaining in the Malucho Islands, either from fear of our vessel being unable to sustain a voyage of such length, or from remembrance of what they had already endured before they reached these islands, and dread of perishing of hunger in midst of the ocean.

On Saturday, 21st December, St. Thomas's day, the King of Tadore brought us two pilots whom we paid beforehand to take us through the channels of the islands. They told us the season for beginning our voyage was excellent, and that the sooner we sailed the better it would be; but being under necessity of waiting for the letters of our comrades, who remained at the Malucho islands, to their friends in Spain, we did not weigh anchor till noon. The two vessels then bade adieu to each other by a reciprocal discharge of artillery. Our comrades followed us as far as they were able in their boat, and we parted in tears. Juan Carvajo remained at Tadore with fifty-three Europeans and thirteen Indians.

The governor, or minister, of the King of Tadore, accompanied us as far as the island Mare; and scarcely had we arrived there before four boats came alongside our vessel, laden with wood, which in less than an hour was taken on board.

All the Malucho islands produce cloves, ginger, sago (the tree of which bread is made), rice, cocoa-nuts, figs, bananas, almonds of larger size than ours, pomegranates sweet as well as acidulous, sugar-canes, melons, cucumbers, pumpkins, a fruit called comilicai\*, extremely refreshing, and of the size of a water melon, a fruit resembling a peach, and called guava†, besides other vegetables good to eat; oil is likewise extracted from the cocoa-nut and gengili. As for useful animals, here are goats, fowls, and a species of bee, not larger than an ant, which builds its hive in the trunks of trees, in which it deposits its honey, of excellent flavour. There is a great variety of parrots, among others white ones, called catara, and red ones denominated nori, which are the most valued, not only on account of the extreme beauty of their plumage, but also for their speaking more plainly the words they are taught than the others do. A parrot of this species costs a bahar of cloves.

Scarcely fifty years are past since the Moors first came to and subdued the Malucho Islands, and introduced their religion. Before this they were peopled by Gentiles, who paid but little attention to the clove-trees.

The island Tadore lies in latitude twenty-seven minutes north, longitude one hundred and sixty one degrees from the line of demarcation. It is nine degrees thirty minutes south-east by south of the first island of this archipelago, called Zamal.

The island Tarenate lies in latitude forty minutes north. Mutir is exactly upon the equinoctial line.

Machian is situate in latitude fifteen minutes south. Bachian in latitude one degree south.

Tarenate, Tadore, Mutir, and Machian have high and cone-shaped mountains on which the clove-tree grows. Bachian, though the largest, is not distinguished from the four other islands. Its mountain of clove-trees is not so much elevated nor so pointed at its summit, as those of the other islands, but its base covers a larger area.

\* A species of anana, or pine apple.

† *Psidium pyrifera*, Linn.

# BOOK IV.

## *Return from the Maluco Islands to Spain.*

KEEPING on our course we passed between several islands, the names of which are as follow: Caioan, Laigoma, Sico, Giogi, Cafi, Laboan \*, Toliman, Titameti, Bachian †, of which we have already spoken, Latalata, Iabobi, Mata, and Batutiga. We were told that in the island of Cafi, the inhabitants are small as pigmies: they are subject to the King of Tadore.

We steered westward of Batutiga, on a course west-south-west. Southward we saw several small islands. Here the pilots from the Molucha Islands recommended we should anchor in some port, that we might not be subject to run ashore on the numerous islets and shallows. We consequently tacked to the south east, and made an island situate in latitude three degrees south, distant fifty-three leagues from Tadore.

This island is called Sulach ‡. The inhabitants are Pagans, and have no king: they are anthropophagi, and, both men and women, wear no other clothing than a small piece of cloth, made of the bark of trees, two fingers broad, which conceals their sexual parts. There are in the neighbourhood other islands, the inhabitants of which feed on human flesh. The names of some of them are: Silan, Nofelao, Biga, Atulabaon, Lertimor, Tenetum, Gonda, Kaiabruru, Manadan, and Benaia §.

We afterwards coasted along the islands Lamatola and Tenetum.

After a run of ten leagues in the same direction from Sulach, we came to an anchorage on a large island called Buru, where we found provisions in abundance; for example, hogs, goats, fowls, sugar-canes, cocoa-nuts, fago, a dish composed of bananas called canali, and chiacares, known here by the name of nanga. Chiacares || are a fruit resembling water melons, but of which the rind is full of knobs. Internally it is full of small red seeds, similar to the seed of the melon; they have no lignous rind, and are of a medullary substance, similar to that of our white beans, but larger; they are very tender, and in taste resemble chesnuts.

We likewise found here another fruit similar in its exterior to pine cones, but of a yellow colour; internally it is white, and when cut bears some resemblance to a pear; it is however much more tender than that fruit, and is of exquisite flavor: it is called comilicai ¶.

The inhabitants of this island have no sovereign: they are gentiles, and, like the people of Sulach, go naked. The island of Buru lies in latitude three degrees thirty minutes south, seventy-five leagues from the Maluco islands \*\*.

\* Laboan, or Labocca, is regarded at present as forming part of the island Bachian. (Hist. Generale des Voyages, tome xi. p. 14.)

† Bachian, one of the five principal islands called the Moluccas. Almost all these islands are laid down in chart xviii. of Monti, who, however, does not state on what grounds he gives them. Many of the names of these islands occur in the note of the dominions of the King of Ternate, in Prevot's Coll. of Voyages, loc. cit.

‡ The Xulla of Robert, and of Moll, the Xoula of the Dutch charts.

§ The author, giving the names of the islands merely from the account of the pilots, is oftentimes incorrect. He mentions ten islands, and has laid down only six; and of the ten he speaks of three or four he names again shortly after. Leytimor is only a peninsula of the island of Amboyna.

|| Perhaps the cucurbita verrucosa, Linn.

¶ The pine-apple.

\*\* Mr. de Bougainville calls this island Boëro. He places it in the same latitude marked by our author; and in his xviii. chart has given Sulla, Boëro, Kilang, and Bouva, the Sulach, Buru, Kailaruru, and Benaia, of Pigafetta.

Ten leagues eastward of Buru there is a still larger island, which is little distant from Gialolo, and is called Ambon\*. It is inhabited by Moors and Gentiles; the former dwell near the sea, the other in the interior. The latter are anthropophagi. The productions of this island are the same as those of Buru.

Between Buru and Ambon are three islands surrounded by shallows: to wit, Vudia, Kailaruru, and Benaia†. Four leagues south of the island of Buru lies the little island Ambalao‡.

At a distance of thirty-five leagues from Buru, in the direction south-west by south, is the island of Banda, with thirteen other islands. In six of these islands mace is grown, and nutmegs. The largest is called Zoroboa; the smaller are Chelichel, Saniananpi, Pulai, Puluru, and Rafoghin§; the other seven are Univeru, Pulan, Barucan, Lailaca, Mamican, Man, and Meut||. In these islands nothing is cultivated but sago, rice, cocoa-nuts, banana, and other fruit trees. They lie very near each other, and are all of them inhabited by Moors who have no sovereign. Banda is situate in latitude six degrees south, longitude one hundred and sixty-three degrees thirty minutes, from the line of demarcation. As it laid out of our course we did not go thither.

Steering south-west by west from Buru, after traversing eight degrees of latitude, we found ourselves off three islands, contiguous one to the other, called Zolot¶, Noumamor, and Galian. While sailing between these islands we experienced a tempest, which made us apprehensive for our lives; so that we made a vow to go on pilgrimage to our Lady of Guida, provided we escaped the threatened danger. We went direct before the wind, and made for a tolerably lofty island, called Mallua, where we anchored, but before we came to our anchorage, we suffered much from the currents and squalls which came from the gullies in the mountains.

The inhabitants of this island are savages, and resemble beasts more than men; they are anthropophagi, and wear no other clothing in common than a narrow slip of cloth made from the bark of trees, to hide their privities; but when they go out to fight they cover their breasts, back, and sides, with pieces of the buffalo's hide, ornamented with corniole\*\*, and the teeth of swine: behind and before they attach tails made of goat's skin. Their hair is turned up and fastened with combs, having large teeth. Their beard they wrap up in leaves, and enclose it in boxes made of reed, a custom which made us laugh immoderately. In one word, they are the ugliest people we met with in the whole course of our voyage.

They have bags made of leaves of trees, in which they place their food and drink; their bows as well as their arrows are made of reeds. When their women first perceived us, they advanced towards us with their bows in their hands in a menacing attitude, but on our making them some trivial presents we became good friends.

We passed a fortnight on this island in repairing the sides of our vessel, which were much strained in the storm: we found on it goats, poultry, fish, cocoa-nuts, wax, and pepper. For a pound of old iron we received in barter fifteen pounds of wax.

\* Ambon is Ceram. From the native appellation the Dutch derived Ambaya, a name given to a fort on the south-western shore of Ceram, and Amboyna the appellation of a fort and town constructed in an island contiguous to Ceram. ENG. TR.

† In the Atlas of Robert are seen the islands Menga, Kelam, and Bone; and in the Dutch chart, (Hist. Gen. des Voyages, tome xi.) Manipa, Kelam, and Bonoa. ‡ At present called Amblan.

§ In the Dutch chart are found Guananapi, Puloay, Pulorhun, and Rosingen.

|| The Recueil de Voyages pour l'établissement de la Compagnie des Indes, tome xi. p. 213, mentions the islands Vayer, Tonjonburong, and Mumuak.

¶ The Solor of modern charts.

\*\* The corniole alluded to appear to be univalve shells, such as terebratuli, &c.



There are here two kinds of pepper, long and round; the fruit of the long pepper-tree resembles the flowers of the hazel. The plant, like the ivy, is a climber, which adheres to the trunks of trees; but its leaves are similar to those of the mulberry. This pepper is called luli. Round pepper grows on a like climber, but its fruit, as maize, is in ears, and is beaten out as that grain; this species of pepper is called lada. The fields of the country are covered with pepper plants, formed into bowers.

At Mallua we took a man on board who engaged to conduct us to an island more abounding in provisions. The island Mallua lies in latitude eight degrees thirty minutes south longitude, one hundred and sixty-nine degrees forty minutes from the line of demarcation.

Our old pilot from the Maluccas related to us on our way that in these parts is an island called Arucheto, the inhabitants of which, men as well as women, are not more than a cubit high, and have ears as long as their body, so that when they lie down to rest one serves as a mattress to lie upon, and the other for a coverlid\*. Their hair is shorn, and they go entirely naked: their voice is sharp, and they run with much swiftness. Their dwellings are caverns under ground, and their aliment fish and a kind of fruit they obtain from between the bark and ligneous body of a certain tree. This fruit, which is white and round as comfits made of coriander, is called by them ambulon. We would willingly have visited this island, but were prevented by the shallows and currents.

On Saturday, 25th January, 1522, at twenty-two o'clock, (half-past two), we sailed from the island Mallua, and after a course south-south-west of five leagues, reached a tolerably large island called Timor. I went on shore alone to treat with the chief of a village, called Amaban, for hogs. He offered me buffaloes, hogs, and goats; but when the merchandize to be given in barter was mentioned we could not agree, as he required much, and we had little remaining to give. Upon this we determined on retaining the chief of another village, called Balibo, who had come on board of his own accord, bringing his son with him. We told him if he wished to recover his liberty he must procure for us six buffaloes, ten hogs, and as many goats. This man, who was apprehensive of being put to death immediately, gave the necessary orders for all we required to be brought to us; and as he had but five goats and two hogs, he gave us seven buffaloes instead of six. This effected, we sent him again on shore, well satisfied, as on releasing him we gave him some linen, a piece of Indian cloth, silk, and cotton, some axes, Indian cutlasses, knives, and mirrors.

The chief of Amaban, to whom I first went, had none but women to wait on him, who went naked like those of the other islands. In their ears they wear small gold earrings, to which they fasten small skeins of silk. On their arms they wear so many bracelets of gold or brass, as to cover the arms to the elbow. The men are likewise naked, but round their neck they have a collar of round plates of gold, and their hair is fastened up with combs of bamboo, ornamented with gold. Some, in lieu of golden rings, wear in their ears circles made from the neck of the pumpkin dried.

White sandal is found on this island alone. It contains, as we have shewn, buffaloes, hogs, and goats, besides fowls and parrots of different plumage. Here, likewise, grow

\* It is worthy of remark that this singular fable is to be seen in Strabo (Geog. lib. xv.) Strabo copied it from Megasthenes, one of the captains of Alexander the Great. Even in our time these islanders amuse themselves with relating similar wonderful stories to travellers. Some of them wished to make Cook believe that in a certain island the men were of stature so gigantic, and of such amazing strength, that they would be able to carry his ship away with them.

To Chiempa succeeds the kingdom of Couhi, the sovereign of which is called Rajah Siri Bummipala. After this follows Great China, the king of which country is the most powerful monarch upon earth. His name is Santōa Rajah. Seventy sovereigns wearing crowns are dependent on him, and each of these have from ten to fifteen others subject to him. The port of this kingdom is called Guantan\*, and among its numerous cities the two principal are Nankin and Comlaha: the king resides in this last. In his palace he has four prime ministers, each of whom gives audience in one of the four fronts of it, which look towards the cardinal points. All the kings and lords of Greater and Upper India are obliged to erect in the middle of the square, as a mark of dependence, the image of an animal stronger than the lion, called chinga, which image is also engraven on the royal signet, and all vessels entering the port of this monarch have the same image in ivory or wax on board. Whenever any of his lords shew signs of disobedience, they are flayed alive; and their skins, dried, pickled, and stuffed, are placed in some conspicuous part of the square, the head bent, and the hands tied over the head in the act of making the zongu, or reverence to the king†. This monarch never shews himself to any one; and whenever desirous of seeing any of his subjects, he causes himself to be carried on a peacock, made with much ingenuity, and richly ornamented, accompanied by six women dressed entirely like himself, so that one cannot be distinguished from the other. He then places himself in the hollow image of a serpent, called Naga, superbly decorated, which has a glass window in its breast, through which the king sees what he pleases, without being seen himself. — He marries his sisters, that so the royal blood may not be intermingled with that of his subjects. His palace is surrounded by seven walls, and to every wall are ten thousand guards, which are relieved every twelve hours. Each wall has its gate, and every gate likewise its guard. At the first gate is a man with a large whip in his hand; at the second, a dog; at the third, a man with an iron club; at the fourth, another with a bow and arrows; at the fifth, again another with a lance; at the sixth, a lion; and at the seventh, two white elephants. In the palace of this monarch are seventy-nine halls, which contain women alone for the service of the king, and which are constantly lighted with flambeaux. It takes an entire day to make the tour of the palace. At the extremity of the palace are four halls, whither the ministers repair when they wish to speak to the king. The walls, the vaulted roof, and even the floor of one of these halls, are ornamented with bronze; in the second, the ornaments are of silver; in the third, of gold; and in the fourth, of pearls and precious stones. In these halls are deposited the gold and other valuables given in tribute to the king. I have seen nothing of all this which I now relate, but merely repeat the account of a Moor, who assured me that he had himself been witness of what he delivered.

The Chinese are fair, and wear clothing; like us they eat off tables. With them crosses are likewise seen, but of the use they put them to I am wholly ignorant.

From China it is that musk is brought: the animal which produces it is a species of civet, which feeds entirely upon a soft wood of the thickness of the finger, called chammaru. In order to extract musk from this animal a leach is fastened on it, which, when well filled with blood, is crushed, and the blood received on a plate that it may be dried in the sun the space of four or five days, in order to perfect it. Every one who keeps one of these animals is bound to pay a certain tribute. The grains of musk brought to Europe are no other than small pieces of goat's flesh steeped in real musk. The blood

\* Canton.

† Bruce (Travels to discover the Sources of the Nile) more than once saw grandees of Abyssinia, who had revolted, punished in this manner.

is sometimes clotted, but it is readily purified. The cat which produces musk is called the castor, and the leach is termed linta.

Coasting along China many different nations are found; to wit: the Chiencis, who inhabit the islands near which pearls are fished, and which produce cinnamon. The Lecchii inhabit the main opposite to these islands. The entrance into the port of these people is under a large mountain, whence all junks and vessels on going into or leaving the port, are obliged to lower their masts. The king of this country is called Moni, and is subject to the King of China, but he has twenty sovereigns under his command. His capital is called Barunaci, and here it is the Eastern Cathay is situate.

Han is an island very lofty and cold, productive of copper, silver, and silk: it is under the dominion of Rajah Zotru. Mili, Jaula, and Gnio, are three countries on the continent, of rather cold temperature. Friagoula and Frianga are two islands which yield copper, silver, pearls, and silk. Bassi is a low country on the main. Sumbdit Pradit is an island very rich in gold, in which the men wear a ring of gold round the leg at the ankle. The neighbouring mountains are inhabited by people who kill their parents after they have attained a certain age, in order to prevent their suffering the maladies incident on old age. The whole of the people we have described are Gentiles.

On Tuesday, 11th February, at night, we quitted the island of Timor, and entered the great sea called Laut Chidol. Bending our course west-south-west, we left northward on our right, from dread of the Portuguese, the island of Zumatra, anciently called Taprobana; Pegu, Bengal, Urizza, Chelini, inhabited by Malays, subjects of the King of Narfinga; Calicut, dependent on the same monarch; Cambuia, inhabited by the Guzzarats; Cananor, Goa, Armus\*, and the whole of India Major.

In this kingdom there are six classes of people; to wit: the Nairi, Panicali, Franai, Pangelini, Macuai, and Poleai. The Nairi are the chiefs; the Panicali, citizens; these two classes converse together: the Franai collect palm-wine, and bananas; the Macuai are fishermen; the Pangelini sailors; and the Poleai sow and gather in rice†. These last constantly inhabit the fields, and never enter towns. When any thing is given to them, it is put on the ground for them to take. When on their journey any where they constantly keep exclaiming, po, po, po; that is to say, take care of me. It was related to us that a Nairi who accidentally had been touched by a Poleai, caused himself to be put to death, unable to survive so great an infamy.

In order to double the Cape of Good Hope we ascended as high as forty-two degrees south; and we were obliged to remain nine weeks opposite to the Cape with our sails lowered, on account of the west and north-west winds which constantly blew, and which terminated in a dreadful tempest. The Cape of Good Hope lies in latitude thirty-four degrees thirty minutes south, sixteen hundred leagues distant from the Cape of Malacca. It is the largest and the most dangerous cape known.

Some of our men, especially the sick, were desirous of making the shore at Mozambique, where is a Portuguese establishment, as our vessel was very leaky, the cold we endured extremely severe, and above all, as we had no other than rice and water to live upon; for all the meat which, for want of salt we had been unable to pickle, had become putrid. But the major part of the crew being still more attached to honor than to life, we determined on using every exertion to return to Spain, however great the perils we might have to undergo.

At length, by the help of God, on the sixth of May we doubled this terrible cape;

\* Ormus.

† These classes, called casts, existed in India in the time of Alexander, and have constantly been preserved down to the present day. Strabo Geog. lib. xv. Diodor. lib. ii. Sonnerat, Voyage aux Indes.

but to effect this we were forced to approach within five leagues of it, as otherwise, from the constancy of west winds, we could never have effected this end \*.

We afterwards steered north-west for two whole months together, (the months of May and June) without any rest, and in this interval lost twenty-one men, including Indians. We made a singular observation on throwing them into the sea; the corpses of the Christians floated with the face towards heaven, but those of the Indians with the face downwards.

We were now almost wholly destitute of provisions, and had not heaven favoured us with fine weather, we should all have perished with hunger. On the 9th of July, on a Wednesday, we distinguished Cape Verd Islands, and anchored off that called Sant Jago.

As we knew we were in an inimical country, and expected we might excite suspicion, we had the precaution of enjoining the men in the long boat, whom we sent on shore for provisions, to say that we had touched at this port on account of our foremast being split on crossing the line, which occasioned us to lose so much time. That the captain-general, with two other vessels, had continued his course to Spain without us. We moreover spoke in such manner as to cause them to imagine we came from the shores of America, and not from the Cape of Good Hope. We obtained credit, and our long-boat was twice laden from shore with rice, in exchange for different merchandize.

In order that we might discover if our journals had been regularly kept, we enquired on shore what day it was, and was answered Thursday; this occasioned us much surprise as, according to our journals, it appeared to be Wednesday. We could not be satisfied of having lost a day; and for my part I was still more astonished at the circumstance than the rest, for I had enjoyed so perfect a state of health as to be able, without interruption, to mark the days of the week, and the months. We afterwards found that there was no mistake in our calculation; since, having constantly travelled westward and followed the course of the sun, on our return to where we departed from we ought naturally to have gained twenty-four hours on those who remained on the spot; this, to be convinced of, requires but a moment's reflection.

The long-boat on its third trip, we perceived, was detained, and we had reason to suspect by the movements of certain caravellas, that a design was meditated against our ship; in consequence, we resolved on immediate flight. We afterwards were informed that it had been stopped on account of one of the sailors having divulged our secret, by relating that the captain-general was dead, and that our ship was the only one of the squadron of Magellan which had returned to Europe.

Thanks to Providence, on Saturday, 6th September, we entered the bay of San Lucar; and of sixty men of which our crew consisted on our leaving the Malucho Islands, but eighteen remained, most of whom were sick. The residue had either ran away from the ship at the island of Timor, had for different crimes there been punished with death, had died of hunger, or become prisoners to the Portuguese at Sant Jago.

From our departure from the bay of San Lucar to the day of our return, we reckoned to have sailed upwards of fourteen thousand six hundred leagues, having circumnavigated the globe from east to west.

On Monday, 8th September, 1522, we cast anchor near the Mole of Seville, and fired the whole of our artillery.

On Tuesday, we repaired in our shirts, barefooted, and carrying a taper in our hands, to the church of our Lady of Victory, and to that of Sta. Maria de Antigua, as we had vowed to do in the hour of danger.

The same occurred to Captains Dixon and Landsdown. (Dixon's Voyage.)

On leaving Seville, I went to Vagliadolid, where I presented to His sacred Majesty Don Carlos (Charles V.) neither gold nor silver indeed, but things far more precious in his eyes : among other articles, I presented him a book written with my own hand, in which, day by day, I had set down every event on our voyage.

I left Vagliadolid as early as I was able, and repaired to Portugal, to present to King John a narrative of what I had seen. Afterwards I travelled through Spain to France, where I presented different articles from the other hemisphere to the Queen Regent, mother of the Most Christian King, Francis I.

At length I returned to Italy, where I devoted myself for ever to the service of Signor Philippe de Villers l'Ile-Adam, Grand Master of Rhodes, to whom also I gave the narrative of my voyage.

IL CAVAGLIERO ANTONIO PIGAFETTA.

# EXTRACT FROM THE TREATISE ON NAVIGATION OF IL CAVAGLIERO ANTONIO PIGAFETTA.

PREFACE OF AMORETTI,

*Translator of the Voyage into modern Italian and into French.*

**T**HE Treatise on Navigation, which, in our manuscript is found at the end of the Voyage, is not assuredly a work calculated for the instruction of navigators of the present day; nevertheless it deserves publication in my esteem, as much on account of the honor it does its author, as its serving to throw light on the history of the human mind, by shewing the progress made in the art of navigation at the commencement of the sixteenth century.

All, acquainted with the sciences, at this time know the method by which the latitude and longitude are determined any where, even in the open sea, and are also apprized of the variation of the magnetic needle; but in the time of Pigafetta the knowledge of these matters was a mystery to all except the higher class of the learned. The nautical instruments were the astrolabe and the compass, of the variations of which latter even pilots, in general, were ignorant, as is deduced from the speech of Magellan to his squadron\*. Regiomontanus had indeed already invented his meteoroscope†, to determine the distances of places from each other, as well in longitude as in latitude; and by means of a similar instrument it was that Amerigo Vespucci, in 1499, after a tempest in which the whole of those on board his vessel had lost their reckoning, ascertained his position in midst of the Atlantic Ocean, by an observation of the conjunction of the moon with Mars, which had been calculated by Regiomontanus himself for the latitude of Ferrara‡. But the use of these instruments, as well as such calculations, were so little known, that Vespucci was regarded by the ship's company as a wonderful man, to whom, in consequence, they gave the command of the vessel: he was afterwards entrusted with other grand enterprizes, in one of which he found occasion to give his name to the new continent.

Now, these methods, with which few persons at that time were acquainted, and of which Pigafetta had made himself master, are nearly the same as those now in use. The latitude of a place is ascertained by taking the elevation of the pole at night, and by observations of that of the sun at noon. The elevation of the pole is found by that of some star the latitude of which is known, generally the polar star, which, in the space of twenty-four hours, describes a small circle round the pole. This circle was known to Pigafetta; and he was not assuredly very wrong in his statement, for its radius was  $3^{\circ} 17' 37''$ , notwithstanding it is now but  $1^{\circ} 46'$ , the polar star approaching gradually towards the pole, after a rate which, in the lapse of so many years, has occasioned this difference. In order to find the vertical distance of the polar star from the pole, as now, it was the custom then to observe the position of some star about the polar, under the

\* See Book ii. of the Voyage of Pigafetta, page 323.

† See the Introduction to above Voyage, parag. iii. and note.

‡ Bartolozzi Ricerche critiche sulla vita d' Amerigo Vespucci.

same meridian, or making some known angle with it. In the present day it is usual to observe the star  $\gamma$  of Cassiopea, which is called the Girdle \*, and is nearly under the same meridian. In the time of Pigafetta they observed the relation the polar star bore to the stars  $\beta$  and  $\gamma$  of the Lesser Bear, which form a triangle with the polar star and the pole. After which they fastened a triangular rule on the centre, or pole, of the astrolabe, by the obtuse angle on which it turned †. Even now a rule nearly similar is used, and the instrument used for this purpose is called nocturlabe ‡. But, spite of the different position and distance of the stars, and notwithstanding the instruments used in the present day are dissimilar to those at that time adopted, it is visible that the method of ascertaining the latitude by the height of the pole at night, and of the sun by day, are still the same; and these methods it is that our author teaches for finding the latitude at sea.

With respect to the ascertainment of the longitude, Messieurs de la Lande and Bougainville conceive the method by taking the horary angles of the moon is the safest and most convenient §; and Tricneker ||, with Bouguer ¶, affirm, that the best method is by the conjunction with, and eclipses of the stars by the moon. Our author recommends the same in the two first of the three methods he gives for this purpose. And as he fails to speak of the mode of finding the longitude by solar eclipses, it is evident that with this he was unacquainted, and consequently that he did not see Magellan practice it at the river of Sta. Cruz, as Castagneda affirms \*\*.

I am aware that all the observations made were computed upon the almanacks of the day, and that these almanacks were far from calculating with that precision which is admired in the ephemerides of the present time the different phenomena of the heavens: I know that the lunar tables were then much less perfect than they now are, and that Pigafetta had not the advantage of being enabled, as the telescope had not yet been invented, to observe the eclipses of the satellites of Jupiter. All results then rested on observations made with very imperfect instruments, and especially the astrolabe, of which Pigafetta often speaks, the meteoroscope, the torquetum, the backstaff, and the universal circle, instruments and machines which were neither certain in their results nor easy or commodious to use, as are now the sextant of Hadley, the English quadrant, the circle of Borda, and other instruments so formed that the motion of the vessel is no impediment to their being used, nor capable of affecting their exactitude. The correctness of the result of observations for determining the longitude necessarily depends on the preciseness of the time at which the observations are made, and the relation it bears to that of the country the longitude of which is known, or supposed to be known: at that period the only means of determining the hour was by the sand glass, in the construction and use of which it is impossible to be exact, so that indeed Pigafetta himself did not rely on it. But at present we have excellent chronometers and sea-watches, which are not liable to any variation, or which, if they experience any, are readily corrected. By means of these it is that we obtain that precision of time which allows of the longitudinal distance being ascertained with the utmost exactitude, a matter as difficult until this invention as it was material for navigators; and for the discovery of

\* Bouguer, *Traité de Navigation*.

† These machines are to be seen in Apiano. *Astronomicum Cæsareum*; and in Lucini. *Arcano deli mare*.

‡ *Dictionnaire de la Marine*, artic. Nocturlabe, where the figure of this instrument is given.

§ *Bougainville Voyage*, tome xi. p. 65.

|| *Allgemeine Geogr. Ephem.* Jan. 1798.

¶ *Traité de Navigation*.

\*\* Page xxxix. note ii.



which Spain and Holland, and after them England and France, have proffered, and already given very considerable rewards. It is therefore evident that Pigafetta, having no exact data, could only give doubtful results; but this does not take away from the astronomers and navigators of his time the merit of having conceived, nor from our author that of having practised, methods which, in modern times, have been brought to perfection, by removing the uncertainty resulting from the use of bad instruments, and a want of correct astronomical and physical observations.

The celebrated navigator, Bougainville, some short time back read a memoir to the National Institute of Paris \*, in which he drew a comparison between the means possessed by Magellan and the immortal Cook: were I to repeat his remarks, we should, without doubt see that, if Cook made more extensive and important voyages, Magellan, destitute as he was of the grand means possessed by the English Commodore, undertook a voyage which exacted a man of far superior talents to his contemporaries, as well as of much greater energy of character. And, as Pigafetta wrote his treatise after the Voyage †, it is highly probable that he received from Magellan himself the nautical instructions he has given, and that this captain-general was taught them by the astronomer Faleiro, whose knowledge was so admirable in his time as to cause him to be suspected of being inspired by some demon.

One cannot, it is true, attribute praise to our author when he attempts to explain the movements of the planets and stars by the system of Ptolemy, the absurdity of which is now demonstrated; but on the other hand this error cannot be considered as blameable in him, when we reflect, that it was then in measure consecrated, and call to mind the misfortunes of Galileo, which were owing to his daring to oppose the system of Copernicus, a century even later. Pigafetta was moreover in error when he pretended to have discovered the longitude by means of the variation of the magnetic needle; but even this error is excusable on referring to the age in which he lived, and considering that he was deceived by a false theory; for he imagined that there were in the heavens some fixed spot towards which the needle constantly pointed ‡; and he was in some measure confirmed in his opinion by the fact; for at that time the magnetic needle on the first meridian, fixed by Ptolemy at the island of Ferro §, was subject to little, if any deviation, and in other places the degrees of longitude corresponded with the degrees of deviation of the needle from the north. Add to all this that the author of the *Arcano del Mare*, a classical book on navigation, among other means of finding the longitude at sea, recommends the paying attention to the variation of the compass ||; and that the celebrated Halley, after attentively noticing the observations of navigators on the deviation of the needle, conceived it possible to form circles by means of which the longitude of places might be determined by the variation, he himself being ignorant that this variation is progressive, and inconstant in its progression, and that consequently it cannot be subjected to calculation; and moreover that computation, as was observed

\* Allgemeine Geogr. Ephem. Decemb. 1798, p. 553.

† In the Treatise he quotes his Voyage, in which he speaks of the stars round the southern pole.

‡ It must nevertheless be observed that he only adopts this explanation of the phenomenon for want of a better.

§ By the table of the declensions of the magnetic needle, published by the learned Lambert in the ephemerides of Berlin, (*Astronomische Jahrbuch* for the year 1779) it will be found, by means of a short calculation, that at the beginning of the sixteenth century the magnetic equator, or the ° of deviation, was near the island of Teneriffe. At present it is distant, and every day becomes further from it. M. de Bougainville found the declension of the needle in this part to be  $14^{\circ} 41'$  W.; and Staunton, who accompanied Lord Macartney on his Embassy to China,  $17^{\circ} 35'$  W.

|| Tome i. p. xi.

by Cook \*, will always be vague, on account of the variation in the same place and at the same time being different, with different needles.

Among the means of ascertaining every day the longitude of any spot while at sea, Pigafetta does not mention the log-book or log, — not because he was unacquainted with it; for he observes that they measured the way they made by means of the chain †, which is the same thing; but probably because he knew the inadequacy of this mode, especially in navigating from one parallel to the other, in the direction of secondary winds, and where borne away by currents the rate of which cannot be duly ascertained. After indicating the means of determining the latitude, Pigafetta gives a long catalogue of the latitudes, boreal as well as austral of the countries, ports, promontories, &c. known to navigators in his time; but this catalogue, being merely a copy of what may be seen in books of geography of the sixteenth century, I have thought it unnecessary to publish.

I should occasionally have found it highly difficult to comprehend this Treatise on Navigation, adapted by the author to the information, but especially to the instruments of his time, but for the museum of our library, which furnished me with astrolabes, compasses, the machine pointing out the winds, and other instruments and books used by navigators at the commencement of the sixteenth century. By comparing these instruments and drawings in the books with what he wrote, I succeeded at length in comprehending a number of words and phrases made use of by him. Still I think it just to declare to the reader, that, generally speaking, I have much abridged this treatise, not only because in many parts it contained trivial information, and that sometimes repeated, but also, and that more especially, on account of the text being frequently unintelligible, more, I have no doubt, owing to the negligence of the copyist, than that of the author. I thought it better, where this has been the case, wholly to omit what was not easy of comprehension than to torture my brain with endeavours at guessing the meaning of the author, and putting in his mouth possibly words that he never uttered.

## EXTRACT OF THE TREATISE ON NAVIGATION OF PIGAFETTA.

### *Description of the Armillary Sphere.*

THE armillary sphere, the design of which Pigafetta promises to give, is used by him to explain the system of the universe according to Ptolemy, and might be used as an astrolabe; for on the top of it is a kind of semicircle, or ring, which serves for its suspension when employed as an astrolabe. Pigafetta begins his treatise with a description of the system of the world, in imitation of all those who have preceded or followed him in writing on the elements of the art of navigation.

“The earth,” he says, “is round; it is suspended and motionless in midst of the celestial bodies. The primum mobile is resident in the axis of the two poles, the arctic and antarctic; which two poles are supposed to be united through the poles of

Third Voyage, book i.

† Book ii. of this Voyage.

the earth: this axis revolves from east to west, and in its revolution carries with it the planets and all the stars. Besides this there is an eighth sphere, the poles of which are  $23^{\circ} 33'$ \* from the equinoctial line; the axis of this sphere turns from west to east.

“The circumference of the earth is supposed to be divided into three hundred and sixty degrees, and to each degree are assigned seventeen leagues and a half: the circumference of the earth is consequently six thousand three hundred leagues. The league by land is three miles, the sea-league is four†.

“The ten circles of the armillary sphere, the six larger of which have the same centre as the earth, serve to determine the climates and geographical site of places. The ecliptic shews the course of the sun and planets. The two tropics point out the distance to which the sun diverges from the equator, northward in summer, and in winter southward. The meridian, ever variable as it passes through all the point of the equator, cutting it vertically, designates the longitudes, and on this circle it is that the latitudes are marked.”

### *Of the Latitude.*

After a description of the system of Ptolemy, and after explaining every part of the armillary sphere, the author teaches the manner of taking the height of the pole, by which means the latitude is found. He places the pole at 0 and the equator at  $90^{\circ}$ ‡. It is well known that at present we reckon from 0 to 90, beginning from the equator and proceeding to the pole.

“I. The polar star,” he says, “is not precisely on the point corresponding with the axis of the earth, but like all the other stars it revolves about this point. In order to know the true position of the polar star with respect to the pole, that of the guards

\* The declination of the ecliptic, which answers to the poles of the eighth sphere of our author, is now  $23^{\circ} 28' 36''$ .

† Supposing the terrestrial globe under the equator to be so divided that half its circumference should consist of land and half of water, and giving consequently to each league three miles and a half, we shall have for the circumference of the globe under the equator twenty-two thousand and fifty miles; a sum differing but little from that which results from giving sixty miles to each degree, which makes the circumference twenty-one thousand six hundred miles. AMORETTI.

Here the Italian editor wholly mistakes his author, and shews greater ignorance than could have been supposed in a librarian having access to works on navigation, and digressing a treatise on this science. All that was meant by Pigafetta in his observation that a league by land is but three miles, while a league at sea is four, is to admonish the reader that in his computation of the circumference of the earth at six thousand three hundred leagues, he means sea and not land leagues, for if the latter were taken the circumference would be eight thousand four hundred. That this is the case is evidently clear from his observing that the sea league is of such length that seventeen and a half go to a degree, consequently seventy miles. Now the degree of longitude on the equator is  $69\frac{1}{2}$  English miles, and the circumference of the globe 24,902 of these miles, which comes very nigh the computation of Pigafetta. Geographical miles were utterly out of the question with him, (those to which Amoretti adverts in computing 60 to a degree). It is not however equally evident what mile he alludes to when he states the league to consist of four; the degree measures  $67\frac{1}{10}$  of the present miles of Milan,  $68\frac{1}{10}$  of those of Tuscany,  $60\frac{1}{10}$  of those of Venice, and  $74\frac{1}{10}$  of those of Rome. ENG. TR.

‡ This again is another error on the part of Amoretti, which attention to the text of the voyage in every instance where the latitudes are marked will clearly shew; it is also evidently a mis-statement from the tenor of the two instructions which follow for finding the latitude, first by an observation of the polar star, and secondly of the sun. Possibly, though he says he declined bewildering his brain in endeavouring to solve some apparently incomprehensible parts of this treatise, Amoretti did not desist from the attempt until it had become considerably clouded; at least thus much may fairly be conjectured from the statements which have produced this and the preceding note. ENG. TR.

must be observed \*: if they should be on the western arm †, the polar star is  $1^{\circ}$  above the pole; if on the rule or line ‡, the polar star is  $3^{\circ} 30'$  beneath the pole §; if on the eastern arm the polar star is  $1^{\circ}$  below the pole. When desirous of taking the height of the pole, after observing in what position the guards are, and after ascertaining the height of the polar star from the horizon, the degrees that this star is above the pole, or below, must be subtracted, or added. I have spoken of the antarctic pole in the narrative of my voyage.

“ II. The latitude of a place may likewise be found by the height of the sun : 1st. When between the equator and the arctic the shade at noon falls towards that pole, the number of degrees and minutes of the sun's declination on that day must be sought for in the almanack, and be deducted from the degrees and minutes of its elevation, taken by observation; subtracting afterwards the remaining degrees from  $90^{\circ}$ ; the result will be the boreal latitude. 2d. When, being in the northern hemisphere, the sun has a northern declination, and the shadow falls towards the south ||, the declination of the sun on that day being found, it must be added to its elevation above the horizon, and the sum of the two be deducted from  $90^{\circ}$ ; the remainder is the latitude north. 3d. When the sun is between the equator and the antarctic pole, and the shadow falls at noon towards the south, the amount of the declination of the sun must be deducted from its elevation, as in the first rule, and the remainder be subtracted from  $90^{\circ}$ , which will give the latitude south. 4th. When, as well as the sun, the observer is between the equator and the antarctic pole, and the shadow at noon falls towards the north, the sum of the declination of the sun must be added to its elevation, as in rule the second, and the amount be deducted from  $90^{\circ}$ ; the remainder gives the latitude south. 5th. When the height of the sun is  $90^{\circ}$ , the distance of the observer from the equator will be equal to the declination of the sun; and if the sun has no declination on that day he will be on the equator. 6th. If the observer be north of the equator, and the sun be in the southern signs, the amount of its declination on that day must be added to its elevation, and the sum be deducted from  $90^{\circ}$ ; the residue is the distance north from the equator. 7th. By a similar operation, when the observer is south of the equator, and the sun in the northern signs, the latitude south may be found.”

### *Of the Longitude.*

“ Longitude indicates the degrees from east to west. I have studied different methods of ascertaining it, and selected three, which appear to me the best ¶. The last is the most convenient for those unacquainted with astrology. Pilots now a days are satisfied with knowing the latitude, and are so presumptuous they refuse to hear mention of longitude.

\* See the preface to this Extract, page 384.

† By this the arm of the instrument used is to be understood; this instrument was probably the meteoroscope of Regiomontanus, which had a cross in the middle, or perhaps the common astrolabe, with the dioptré, or medecino as Pigafetta calls it, on the equator.

‡ Pigafetta means the meridional line from the pole to the equator.

§ I have previously remarked that, although the radius of the circle described by the polar star measures at this time no more than a degree and a half, in the time of Pigafetta it measured  $3^{\circ} 17' 37''$ ; consequently when our author says  $3^{\circ} 30'$  he is not very wide of the truth; and when the imperfection of the different instruments used by him is considered, there can remain no cause for surprize at an error of such little magnitude.

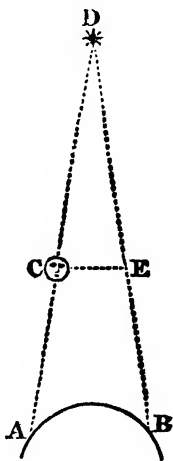
|| As occurs when the observer is between the place of the sun in the ecliptic and the equator.

¶ These three methods are probably those which, according to Castagneda were taught Magellan by the astrologer Faleiro.

“ 1st. By the latitude of the moon one may form a judgment of the longitude of the spot where the observation is made. By the latitude of the moon is understood its distance from the ecliptic. The ecliptic is the line of route or orbit of the sun. The moon in her rotation constantly gets further from this line until at her greatest distance from it; afterwards she approaches it again until in conjunction with the dragon's head or dragon's tail \*, when she cuts the ecliptic. Now, as the moon, on receding from the ecliptic, at the same time passes to the west, she must necessarily have a greater latitude on one part of the globe than the other; and when her latitude is known, which is ascertained in degrees and minutes by the astrolabe, her position east or west is found, and the number of degrees and minutes she diverges to either quarter. But the longitude of the spot of observation cannot be determined without knowing exactly in what latitude and longitude the moon ought to be at the same instant at the place of departure, at Seville for example: when the latitude and longitude of the moon at Seville in degrees and minutes are known, by comparing them with the latitude and longitude of the spot, the difference will shew how many hours and minutes the meridian in which the observer may be, is distant from that of Seville; and thus the longitude from that city may be ascertained.

“ 2d. The moon furnishes me with another method of determining the longitude of any spot; but for this purpose must be known the precise instant when at Seville the moon is in conjunction with a certain star or planet, or when she is in opposition to the sun, or forms an exactly ascertained angle with that planet, which I gather from an almanack. Now, as either phenomenon occurs in the east before it does in the west, I discover my longitude west by the time that has elapsed between its occurrence at Seville and the instant at which it is observed by me. But if the phenomenon takes place at the point of observation before it happens at Seville, the difference of time points out the longitude eastward. For each hour fifteen degrees of longitude must be reckoned.

“ No great genius is required to comprehend what I have mentioned. It should be known that the moon has a peculiar movement, opposite to the general one of the heavens, seeing her course is from west to east, and every two hours she passes over a degree and some minutes. And as the moon is placed in the first heaven and the stars in the eighth, she occasionally eclipses certain stars, by passing between them and us, or intercepts their rays from our observance, an event which cannot take place at the same time to be seen at Seville and at Valentia, which the figure beneath will explain †.”



\* That is to say, the nodes or orbit of the moon cut the ecliptic.

† This figure was wanting in the manuscript, but was easily supplied from the text.

By this figure is seen that the rays of the star D are intercepted by the moon at C from the observance of those at A, but not from that of those at B; although when the moon proceeds to E, the same star will in like manner be concealed from the gazer at B.

“ III. The compass may likewise furnish a much more ready means of discovering the longitude. It is well known that the compass, or the magnetic needle which it contains, constantly points to one fixed spot, on account of the tendency of the magnet towards the pole. The cause of this tendency is the magnet finding no point at rest in the heavens except the pole, to which consequently it ever directs itself. This, at least, is the explanation I propose of this phenomenon, and that which I shall deem a good one, until experience produce a better.

“ To know, by means of the magnet, the longitude of a place, form a great circle, in which the compass may be placed, and divide this circle into three hundred and sixty degrees: turn the compass until the magnetic needle points to  $360^{\circ}$ , where the arctic pole is indicated. When the needle is at rest draw a thread from the arctic pole to the antarctic pole, which may cut the centre, and let this thread be of greater length than the diameter of the compass. After this take the line of noon, which is to be determined by the greatest elevation of the sun: turn then the compass until the thread which traverses it is on the line of the true meridian, that is to say, on the shadow cast by the dial at noon; then, with the remainder of the thread, draw a line from the antarctic pole of the needle which passing through the centre may cut the fleur-de-lis which points out the north, and observe how many degrees the needle is distant from the meridional line, that is from the true pole; the number of degrees distant will indicate the number of degrees of longitude from the spot where the compass points true\*: consequently, the more exact the observation of the true meridian, the more exactly will the degree of longitude be determined. By what I have said will be seen that the meridian must never be determined by the compass, because it north-east or north-west† immediately after a departure from the true meridian, but with the astrolabe at noon; and the noon must be found by ascertainment of the instant of the greatest elevation of the sun.

“ When the height of the sun at noon cannot be taken, it may be determined by a sand-glass, by reckoning the hours of the night, from the instant the sun sets to that of its rising. When the length of the night is thus known, that of the day is gathered by subtracting it from twenty four; by dividing this by two the sum is the time from sun-rise till noon, at which instant the gnomon will indicate the meridian. But the sand-glass being oftentimes incorrect, it is far better to take the height of the pole, by means of the astrolabe and its mediclino‡.

“ The true meridian may also be found, or rather the equinoctial line which cuts the meridian at right angles, by observing the points at which the sun rises and sets, and measuring its deviation north or south from the equinox. To effect this, an astrolabe is made of the earth; that is to say, a circle is formed representing the circumference of the earth divided into three hundred and sixty degrees. Fix two pins

\* That is to say, when the magnetic needle coincides with the meridian.

† Meaning it declines towards the east or the west from the north.

‡ I cannot find that any astronomer or astrologer in the days of Pigafetta, for example Regiomontanus, Apianus, Gemma Frisius, Danti, Clavius &c. make any mention whatever of the mediclino; but by what our author here says, as well as in other places, it seems the mediclino is the moveable rule fixed on the centre of the astrolabe, which is sometimes denominated alhidada, at others dioptra, and in Italian. *traguardo*.

in this circle in such manner that a line from one to the other may cut the centre, and at sun-rise turn this circle in such manner that the pins may be in a line with the centre of the sun; at the instant the sun sets repeat the same operation. By this means you will find the declination of the sun from the equinoctial line, whether northward or southward. When you have determined the angle at which the sun rises and sets from the equinoctial line, you obtain the mean distance, which is the meridional line; and you will thus see how much the needle north-easts or north-wards: by the degrees of deviation of the needle you will know your longitude from the Fortunate islands, that is to say, from Teneriffe, whether eastward or westward. This method has the sanction of experience \*."

### *On Steering the Ship.*

"Would you navigate to any country, it is first requisite you should know its geographical position, that is to say its latitude and longitude. After which, by the help of the compass you will steer directly towards it. And as the needle north-easts or north-wards, its deviation must be found by the means I have prescribed; then subtract or add what is necessary to the compass in order that the prow of the ship, regulated by the compass, may constantly point in the direction required.

"If unfortunately the compass should be lost, or if its real deviation from the meridional line should be unknown, the pilot must regulate himself by the sun at noon. When the meridian is so fixed that it cuts directly across the vessel its prow may be directed any way at pleasure. For example; supposing the pilot would steer from north-east to south-west, turn the compass in such manner that the vessel may have its prow towards the west and its poop towards the east; then on the circle of the winds, divided into three hundred and sixty degrees, or four times ninety, fix two pins, one at forty-five degrees from the east and the north, the other at equal distance from the west and south; turn then the helm so that the two pins may be on the meridian, and the prow will point whither the vessel is to steer: provided the pins should not be on the true meridional line, the course will be a false one, and must be rectified. When the vessel makes the land the truth of what I say will appear.

"By means of an astrolabe composed of plates †, the meridional line may readily be found, as well as the poles and the equinoctial line by observation of the sun by day, and at night of the moon and stars. For these last, instead of the *vergezita* ‡, two small sticks must be placed in the middle of the astrolabe, through which the star may be observed."

After thus describing the method of giving the direction wished for to the vessel, Pigafetta proceeds to teach the means of determining the point of the compass to which the vessel in sailing from one part to another should steer. In order to make himself the better understood he adduces several examples. "Are you desirous," says he, "of going from south to north, or from north to south, under the same longitude, keep constantly on the same meridional line. Would you sail from east to

\* already observed that in the time of Pigafetta the needle at the Canaries was nearly on the "or; and it must further be observed that chance has carried navigators into certain degrees of declination corresponded with the degrees of longitude from the island of

made of different kinds of plates, the largest for sake of lightness being of paste-

\* That is to say, the rafs or copper.

† This figure was wanting thing with the mediclino. See Note, page 389.



west, or the contrary, keep always under the same parallel. If inclined to proceed from one spot to another which is distant as many degrees of longitude as of latitude, you must steer  $45^{\circ}$  towards the north-west or north-east, or towards the south-west or south-east. If the difference of the latitude is greater than that of the longitude, add to  $45^{\circ}$  the number of degrees which the latitude has more than the longitude to the pole to which you are steering. For example; suppose I wished to go from Cape St. Vincent to Cape Bojador, I compute the degrees of longitude and latitude to know the difference between the two capes; I find the difference of longitude to be  $5^{\circ} 30'$ , of latitude  $11^{\circ}$ : I therefore deduct  $5^{\circ} 30'$  from  $11^{\circ}$ , and find the remainder  $5^{\circ} 30'$  more than north-east towards the north, and less than south-west towards the south. If the longitude is greater than the latitude, the inferior number of degrees is in like manner deducted from the greater; and the course to steer will be the remainder of  $45^{\circ}$ , after subtracting the quotient. For example; suppose I wish to go from the island Ferro to Guadaloupe, I find the former lies in latitude  $27^{\circ}$ , the other in  $15^{\circ}$  north; I thus ascertain the difference to be  $12^{\circ}$  of latitude. I next observe on the chart their longitudes; as that of Ferro is seen to be  $1^{\circ}$ , and that of Guadaloupe  $45^{\circ}$ , the difference is  $44^{\circ}$ ; from this I subtract the  $12^{\circ}$  of latitude, and have for a remainder  $32^{\circ}$ ; this residue I deduct from  $45^{\circ}$ , and have  $13^{\circ}$  for the difference. The course to steer must therefore be from north-east  $13^{\circ}$  north, to south-west  $13^{\circ}$  south \*."

#### *Direction of the Winds.*

"The compass, on which the rhumbs are marked, divided into  $360^{\circ}$ , will give a better idea of what I have just now remarked, it being first understood that the pilot must reckon his point of departure from the centre of the compass; he must at the same time take care to determine precisely the true pole by the elevation of the sun, and not from the needle, prone to deviate from the north towards the east and west.

In order to learn whence the wind blows, fix a small stick with a vane in the middle of the compass, so placed as that the north and south may be upon the true meridional line. The direction of the vane acted upon by the wind will show whither it blows. On the equinoctial line of the compass are the east and west; at  $45^{\circ}$  you find the north-east, north-west, south-east and south-west; at  $22\frac{1}{2}^{\circ}$  north-north-east and north-north-west, and so with the rest."

\* This last is an error. Where the longitude is greater than the latitude, the surplus should be added to the longitudinal direction, whether east or west. Thus, instead of steering south-west  $13^{\circ}$  south, in the instance of this problem, the vessel should be steered south-west  $13^{\circ}$  west. ENG. TR.

# PARTICULARS RESPECTING THE CAVALHERO M. BEHAIM,

A CELEBRATED PORTUGUESE NAVIGATOR ;

With a DESCRIPTION of his TERRESTRIAL GLOBE.

Translated into French from the German of Mr. DE MURR, by H. J. JANSEN, and from the French into English, for the first time, for this Work.

*Qui mare, qui terras, qui descripsitque profundum  
Terra orbem radio, adgressus fabricumque globumque,  
Ingentem huic nautam conor comprehendere chartis.*

RESENDIUS LUSITANUS.

WHAT Martin Behaim really was will here be found without exaggeration or de-  
traction; *uni æquus veritati*. I have made a point of searching with nice  
scrutiny into all that relates to this celebrated navigator; a labour in which I have been  
greatly facilitated by the complaisance of the individual who at this time holds posses-  
sion of the papers belonging to the family. Finding myself thus richly provided with  
authentic documents, I have spared no care nor pains to throw light on a matter so im-  
portant in the history of navigation as the life and merits of this great man. If I have  
not wholly succeeded, at least I hope, by my exertions to have fulfilled the wish ex-  
pressed by Professor Gebauer, in his History of Portugal, page 123.

“ It appears to me,” says he, “ extremely uncertain whether or no Martin Behaim  
was really the first who discovered the new world, as Ricciolus affirms; and whether or  
no, as is insisted upon by Benzon, he ever passed the Straits of Magellan. We are  
not to conclude, from what is advanced by Schedel, in his Latin Chronicle, of the  
discovery of Congo being attributable to Martin Behaim and James Canus; of their  
having passed the equinoctial line, and failed so far towards the south that, on fronting  
the east their shadow fell on their right hand; that therefore they must have proceeded  
as far as to America; for the circumstance adverted to thus takes place always in the  
southern hemisphere. The ancient deeds and diplomas consulted by Wuelfer, Wagen-  
feil, Stuvénus, and Doppelmayr, make mention of no such fact. But what, in my  
mind, renders the assertions of Ricciolus and Benzon exceedingly dubious, or rather  
what stands almost utterly in opposition to their assertions, is the globe of Behaim,  
which must have been constructed as late as 1492, the year on which Christoval Colon  
began his voyage. Doppelmayr has given a plan of this globe; and the more I exa-  
mine this, the more I conceive doubtful that glory which Colon and Magellan have  
hitherto had ascribed to them. It would not consequently be labor lost in any one to  
make public the life of the Cavalhero, Martin Behaim, written in the style of the pre-  
sent day, and without curtailing any thing, or making any addition to the actual truth,  
deducing the facts from authentic documents alone. By such a procedure numerous  
errors would doubtless be discovered, as well in what has been said in favour of, as  
against this navigator, errors which, as is justly observed by the Emperor Maximilian,  
are inseparable from the history of those who visit distant countries. This observation  
will be well confirmed by the following specimen: Pieter Vander Ax, in a collection  
of

of voyages published by him in Dutch, under the general title of 'A Collection of the most memorable Voyages and Travels to the East and West-Indies \*' at the beginning of the second volume, page vii. while speaking of the inducements by which Colon was prompted to attempt his discoveries, remarks, "he was confirmed in this opinion by Martin Van Boheeme, a Portuguese of the island Fayal, his friend, and a great geographer †." It perhaps would be difficult to find in any other author so great a number of errors in so small a space." Still this statement has been copied by Robertson.

Wagenfeil, as appears from a passage in a letter written by him from Leibnitz, to Burnet ‡, in 1697, intended to have given to the world some memoirs relative to Martin Behaim; but it is fair to presume that, without the advantage of reference to the authentic documents intrusted to me, he would have produced little that could be new.

It is surprising that Mr. Robertson should have wished to deprive Germany of the honor of having given birth to the Cavalhero Behaim; and that he should affirm him to be a Portuguese, called Martino de Boemia, merely because Herrera § speaks of a certain Martino de Boemia, as a particular friend of Colon; and because Gomera || says that the King of Portugal possessed a globe made by this Martin of Bohemia; and that on such slender authority he should make the extraordinary conclusion ¶, "that the Germans were probably induced to infer from the name of this artist, (Martin, of Boemia), that he was born in Bohemia, and on this conjecture founded their imaginary claim."

If a writer would give a history of America, it is fit he should first be acquainted with the treatise of Stuvenius. That mistakes may be avoided similar to what I have noticed of Robertson, I have communicated the result of my enquiries to Mr. Russel, who is now employed on a history of America, in which many errors of Mr. Robertson will be corrected; and in the critique which Mr. Forster is about to publish on the work of Robertson, the gross mistake I have noticed will no doubt excite his attention.

As in repeating the words of Behaim, I shall frequently have occasion to refer to his terrestrial globe, I conceive it necessary to preface what I have to deliver by a description of it, after first saying a few words of the globes and charts of the ancients.

From a passage of Ptolemy we may conclude that, a hundred and fifty years before the Christian æra, Hipparchus traced the figures of stars on a globe \*\*. Still, the first inventor of a terrestrial globe is unknown; probably it was Anaximander, a disciple of Thales, for in a passage of Diogenes Laertius (Book ii. chap. i.) he states, speaking of him, that "he marked the confines of the land and seas upon a globe." Globes of this description, that is to say, terrestrial globes, are seen on ancient medals, and in paintings of antiquity ††. Demetrius Poliorcetes caused a terrestrial globe to be represented on his royal mantle ††. Xiphilin says, after Dion, that Domitian ordered Metius

\* Verfameling der gedenkwaardigste zee-en-land-rissen na Oost, en West Indien zo deelen in 8°. Amsterdam, 1706.

† Deze meening wierd hem door Martin Van Boheeme, van t'eyland Fayal geboortig, een Portugees, zynen vriend, een groote weerdkundiger, bevestigd.

‡ We are led to expect the memoirs of a gentleman of Nuremberg, reputed to have known America before Colon. Mr. Wagenfeil speaks of this at least in a work of geography published by him. (Pera juvenili; Synops. Geog. p. 105.)

§ Decad. i. lib. i. cap. ii. et Decad. ii. lib. ii. cap. xix.

|| Historia General de las Indias, ch. xci.

¶ Note xvii. Book 2d of his History of America.

\*\* Montucla. Histoire des Mathematiques, tome i. p. 274.

†† Picture d'Ercole, tome xx. tav. 8.

†† Plutarch. Life of Demetrius.

Pomposianus to be put to death for having a terrestrial globe painted in his room, as if he aspired to supreme power. With respect to the antiquity of geographical charts, Fabricius \* and Hauber † may be consulted. More than one interpreter of the Scriptures pretend that geographical charts are alluded to in the Book of Joshua, chap. 18th. In Egypt, Sesostris, whom Father Tourmenine imagines to be the Pharaoh of Scripture, directed geographical charts to be constructed ‡. Aristagoras, tyrant of Miletus, shewed to Cleomenes, King of Macedonia, a table of brass, on which was represented the position of all the lands, seas, and towns from Sparta to Suza, the capital of Persia §. This verse also of Propertius is well known :

Depicted worlds I strive from charts to know ||.

As well as the chart of Peutinger, of the time of Diocletian, (and not of Theodosius), which my deceased friend, M. Scheyb, published at Vienna in 1753. Agathodemon, the mechanic of Alexandria, who lived in the fifth century, was the first who constructed charts for the geography of Ptolomey. These are the twenty-seven charts yet in existence, but which assuredly had undergone considerable changes previous to their being rendered into Latin, in 1471, by Nicholas Donis, a Benedictine of Reichenback ; before which time the names were written in Greek characters. In 1762, I saw, in the possession of Mr. Reimarus, at Hamburgh, the fragment of a chart of Italy, (Ptolomey, tab. viii.) with the names in Greek, made in the eleventh century. In 1478, a copy of this chart was taken at Rome, on brass or pewter, the names of the places on which were engraven with the punch. In 1482, Leonard Hal caused this chart to be carved on wood, together with five other charts of modern geography, planned by Nicolas Donis. Twenty-three charts of this collection at Ulm, which were reprinted in 1486, are to be found given upon vellum, and illuminated in the Latin manuscript of Ptolomey, written in 1502, which belongs to the library of the town of Nuremberg. In the library of Ebner there is a beautiful manuscript of Ptolomey, consisting of one hundred and three large sheets in folio, with the twenty-seven charts of Nicolas Donis, in gum painting. How ridiculous the opinion of the first Christians of Alexandria respecting the form of the earth, may be gathered from the representation given of it in the Christian Topography, which some writers ascribe to Rufinus Indopleuste ¶. Charlemagne was accustomed to dine from a silver table, on which a map of the world was engraven ; so, at least, we are told by Eginhard.

In a volume which contains a collection of the Voyages of Marco Polo, Saint Brandan, Mandeville, Ulric de Priuli, and Johan Schildperger, and which is still in the library of the city of Nuremberg \*\*, the ancient owner of this book, Matthew Bratzl, receiver-general of the domains of the Elector of Bavaria, among other notes inserted by him in the year 1488, placed the following : “ I have collected and joined together the above-mentioned book, on account of a very beautiful and valuable map of the world, which I have caused to be planned with greatest care, in order that it may be of service to those who shall read the narratives of these travellers, and instruct them respecting countries hitherto unknown ; teach them the manners and customs of the inhabitants ; and enable them, where the text may be insufficient for this purpose, to discover the proper road, &c. I moreover request and will, that such of my heirs as may

\* Page iv. edit. Reimarius.

† Biblioth. Antiq. p. 195.

‡ Eustathius ad Dionys. Parieg.

§ Herodotus, lib. iv. chap. 40.

|| Cogor et e tabula pictos ediscere mundos.—Lib. iv. eleg. iii. v. 35.

¶ Fabricius, Bibl. Gr. lib. iii. p. 613.

\*\* Catal. Bibl. Solg. i. No. 34.

possess this map of the world, have likewise possession of the above-mentioned volume, and that the two be never separate the one from the other." This map of the world is no longer to be found among the manuscripts of the library of Nuremberg, and there is strong reason to conclude that it has long ago been lost.

## DESCRIPTION OF THE TERRESTRIAL GLOBE OF MARTIN BEHAIM.

THE terrestrial globe of Martin Behaim is one foot eight inches, Paris measure, in diameter, and is supported on a stand of iron of some height, having three branches. It is preserved among the archives of the family of Behaim.

The meridian is of iron, but the horizon of brass; this latter is of more recent formation, (probably made by John Werner,) as seems to be indicated by the inscription on the border, which is, "Anno Domini, 1510, die Novembris."

The countries belonging to different powers are marked on this globe by flags bearing their arms. These flags, as well as the dwellings and figures of the inhabitants of the respective countries, are painted with great nicety. The names of places are marked in red and yellow ink. The globe is covered with black vellum. Every thing upon it is indicated according to the descriptions of Marco Polo and Mandeville, and exactly after the manner conceived by Colon; that is to say, that Cipango, or Japan, is that country which stretches farthest towards the east; this was the cause that, on his making discovery of America, he mistook that continent for a part of Asia; that he gave it the name of the West-Indies; and that he preserved to the close of life the project of finding a route to the East-Indies by this course; a project conceived also by Cortez \*, at the very time Magellan had already passed the famous strait which bears his name into the South Sea, and discovered there the Philippine Islands: for formerly nothing in this quarter was thought of but Cipango and Cathay. If when Colon discovered the island Guanahani, which is one of the Lucayes, he had continued his course in a direct line, he would infallibly have entered the Gulf of Mexico. Thus also he failed of discovering, in 1502, on his fourth voyage, the country of Yucatan, and the whole coast of the Mexican Gulf, from which he was but thirty leagues distant †.

Among the archives of the family of Behaim is a tolerably exact and pretty well executed drawing of this globe, on two sheets of vellum.

At the lower part of the globe, near the antarctic pole, in a circle of seven inches diameter, is painted the eagle of Nuremberg, and with it the head of a young madonna. Below this, in the middle, are the arms of Nutzel; on the right of the eagle, those of the families Volkamer and Behaim; and on the left those of the families of Groland and Holzschuer. Round these paintings, on five lines, is inscribed as follows: "At the request and order of the wise and venerable magistrates of the noble imperial city of Nuremberg, at present in office, Gabriel Notzel, P. Volkamer, and Nicolas Groland, this globe was designed and executed, from the discoveries and indications of the Cavalhero Martin Behaim, a man well versed in the cosmographic art, and one who has sailed over more than a third of the globe. The whole remainder, collected with attention from the works of Ptolomey, Pliny, Strabo, and Marco Polo, and placed, the seas, as well as the different lands, according to their form and position, in pursuance to the order of the before-mentioned magistrates delivered to George Holzschuer, who assisted in the execution of this globe in 1492; which globe was left by the said Martin Behaim to the city of Nuremberg, as a token of remembrance and homage, previous to his

\* Robertson, History of America.

† Herrera, lib. v. cap. v.

return to his wife, settled in an island seven hundred leagues distant, where he proposes to end his days."

On the lower part of the globe, beneath the equinoctial line, the following inscription is seen:—

"Be it known that this figure of the globe represents the whole extent of the earth, in latitude as well as in longitude, laid down geometrically, 1° according to Ptolemy, from the *Cosmographia Ptolomæi*; 2° from the relations of the Cavagliero Marco Polo, who travelled into the east in the year 1250, from Venice; 3° from what the respectable Doctor, Sir John Mandeville, published in 1322, in his work on the countries in the east unknown to Ptolemy, and on all the islands pertaining thereto, from which we draw our spices and precious stones; and 4° from the voyages caused to be undertaken by Don Juan King of Portugal, in 1485, to the remaining parts of the globe in the south which were unknown to Ptolemy, at the discovery of which I, who made this globe, was present. Towards the west is the sea called the Ocean, on which also we have navigated beyond the limits described by Ptolemy, from the columns of Hercules to the Azores Islands, Fayal and Pico, inhabited by the noble and pious Ritter, Job de Huerter, of Moerkirchen, my dearly beloved father-in-law, who resides there with the colonists transported from Flanders, and who possesses and governs them. Moreover, towards the gloomy regions of the north, are found on this globe, beyond the space known to Ptolemy, Iceland, Norway, and Russia, countries newly discovered, and to which every year vessels are dispatched, notwithstanding people in general are simple enough to imagine, that, from the form of the globe all parts cannot be travelled over or navigated."

Beneath Prince's Island, and those of Saint Thomas and Saint Martin, is written:—

"These islands were discovered by the vessels which the King of Portugal sent to these keys of the countries of the Moors in the year 1484. They were then no other than deserts, in which no man was found, nor any thing but forests and birds. The King of Portugal annually transports hither such of his subjects as have merited death, men and women, and gives them lands to cultivate for their support, to the end these islands may be peopled with Portuguese."

"Item.—In these countries summer reigns while with us it is winter; and all the feathery tribe, and all the quadrupeds, are differently formed to those of our country. Much amber grows here also, which we, in Portugal, call *algalhia*."

Doppelmayr has given a representation of this globe on a very small scale, though, generally speaking, in a pretty correct manner. However there are several places laid down on the globe which Doppelmayr does not quote. I shall subjoin all that is written upon it from a faithful copy taken by me from the globe itself.

At the Cape of Good Hope is written:—

"Here the columns of the King of Portugal were erected, in the year of our Saviour 1485."

"In the year from the birth of Jesus Christ, 1484, the illustrious Don Juan, King of Portugal, caused two vessels to be equipped, called *caravellas*, well furnished with men, and with provisions and arms for three years. This equipment was ordered to pass the columns raised by Hercules in Africa, navigating constantly towards the south, and towards the countries where the sun rises as far as might be possible; the said King moreover caused these vessels to be laden with all kinds of merchandize, to be sold or bartered; as well, he put on board eighteen horses, richly caparisoned, designed as presents for the Moorish Kings, one to each, as we might deem expedient. Specimens were likewise given to us of all kinds of spices, to exhibit to the Moors, that they might know

know what objects we came in search of among them. Thus equipped, we sailed from the port of Lisbon, steering for Madeira, where the Portugal sugar grows; and after doubling the Fortunate Islands, and the barren islands the Canaries, we found some Moorish Kings, to whom we made presents, and from whom we received others in exchange. We arrived in the country called the kingdom of Gambia, where grows the cardamom-tree; it is eight hundred German leagues distant from Portugal: after this we arrived in the dominions of the King of Furfur, which is twelve hundred German miles or leagues further distant, and in which the pepper grows called Portugal pepper. Beyond is a country in which we found the cinnamon-bark. Being now two thousand three hundred leagues away from Portugal, we tacked about, and, after a voyage of nineteen months, returned to our king and country."

On the other side of the south cape of Africa, near Riotucunero (now Targonero) and Porto Bartholo Viego, the Portuguese flag is painted, and by the side of it appears the following:—

"Thus far the Portuguese vessels advanced, and here they erected their column; and after a voyage of nineteen months they returned to their own country."

#### *Cape Verd.*

"It should be known that the sea, called the Ocean, which lies between Cape Verd and this country, has a rapid current towards the south. When Hercules had arrived thus far with his ships, and noticed this phenomenon, he returned, and planted his columns, the inscription on which \* proves that Hercules was not imagined to have proceeded farther; but the writer of this article was dispatched beyond this point in the year 1485, by the King of Portugal."

From the globe of Behaim, on which America is entirely left out, it is apparent that he had no knowledge of this division of the globe at the period of its construction, and we may readily conclude that Stuvénius would never have written his treatise *De vero Novi Orbis Inventore*, if he had seen this globe, of which he knew only by report, as he himself acknowledges †. What Behaim says of the island Antilia, or *Septe Ritade*, as well as of that of Saint Brandan, is given by him merely from the relation of others.

"The Fortunate Islands, or those of Cape Verd, possess a healthy climate, and have been inhabited by the Portuguese ever since the year 1472."

#### *The Islands Azores, or Catharides.*

"These islands were peopled in the year 1466, when the King of Portugal gave them, after much entreaty, to Isabella, the Duchess of Burgundy, his sister. At that time an obstinate war raged in Flanders, with a great dearth; and the said Duchess sent from Flanders to these islands a number of people, men and women, and of all trades; with them likewise she sent priests, and every appendage to religious worship, and several vessels freighted with furniture, and all things requisite for the culture of the land and construction of houses; she moreover made them a present of necessaries for subsistence sufficient for two years, on condition that they, for time to come, should think of her at mass, and every one say for her one ave-maria. The number of persons sent on this occasion amounted to two thousand; so that what with their descendants, and those who have been added to their number from abroad, the population now

\* Ne plus ultra.

† Page 43. Edit. Francof. ad Mœnum, 1714, in 8vo.



amounts to many thousands. In 1490, also, many thousand persons, Germans as well as Flemings, resided here, who had emigrated under the noble knight Job de Huertel, Lord of Moerkirchen, in Flanders, my dear father-in-law, to whom these islands were given for himself and his descendants by the said Dukes of Burgundy. In these islands grows the Portugal sugar, fruits ripen twice in the year, and all kinds of provision are very cheap; so that they are competent to support a still greater number of inhabitants who may go thither to seek subsistence.

In the year of our Lord 1431, when the infant Don Peter reigned in Portugal, two vessels were fitted out by his orders, stored with every requisite for two years' subsistence of the crews, and dispatched for the exploration of the countries behind St. Jago de Finisterre.\* These vessels, thus equipped, constantly made sail towards the west for the space of nearly five hundred German leagues. At length they one day discovered these ten islands, and on their landing found only deserts, and birds which were so tame that they never avoided man; in these deserts no man was found, nor any quadruped, which accounts for the tameness of the feathered race. On this account these islands received the name of Azores (Astures) or goshawks. Furthermore, in compliance with orders from the King of Portugal, in the succeeding year sixteen vessels were dispatched hither, carrying with them all kinds of domestic animals, a portion of each of which was landed on every island that they might multiply thereon."

*The Island Antilia, called also Septe Ritade\*.*

"In the year of Christ, 734, that year in which the whole of Spain was conquered by the Pagans from Africa, the island Antilia, called also Septe Ritade, was peopled by an archbishop from Porto, in Portugal, accompanied by six bishops and a number of Christians, men and women, who had fled from Spain with their cattle and effects. It was a Spanish vessel which, in 1414, approached the nearest to this island."

*The Island Saint Brandan†.*

"In the year of Christ, 565, Saint Brandan touched at this island and landed here, seeing many wonderful things; and after the lapse of seven years, returned to his own country."

*The*

\* This is one of the most remarkable things on the globe of Behaim. The Portuguese from this appear to have known, even thus early, the name of Antilles, the explanation of which term is thus given in the great Portuguese Dictionary of Bluteau, under the head Antilhas. "Hé o nome de humas pequenas ilhas do archipelago da America Meridional assikchamadas, como quem dissera ilhas oppostas, ou frontieras as grandes ilhas da America." This is the name of certain small islands of the archipelago of Southern America, so denominated to signify their being opposite to or limitaneous of the great islands of America.

† "This island," says Honorius Philoponus, of the order of Benedictines (Nova typis transacta navigatio novi orbis Indię Occidentalis R. R. patrum monachorum ordinis S. Benedicti, 1621 fol. pag. 14.) "some geographers and hydrographers call the island of Saint Brandun. It is situate in the Northern Ocean, off the Cortereal region, or that of New France in North America." It is placed, on the globe of Behaim, between the latitudes 0° and 8° N. from 42° to 48° west of the island of Ferro. The position given by the description of Philoponus is that of Newfoundland, while excepting in his ascribing to it a more western longitude than what that country has in reality (an error pardonable in his age) the site of the imaginary island of Behaim corresponds with that of Guiana.

This imaginary island seems also to have been called Ima, and the fabulous voyage of St. Brandan is noticed in the fifth and sixth chapters of the Bibliotheca Horacensi of Jean de Bos. St. Brandan is likewise mentioned in the Actis Sanctorum, d. xvi Maii (t. iii. p. 602); the passage runs as follows:—

"With his master (Brandan) and his companions he prepared to visit an island of great celebrity, situate in those parts of the Ocean, and called Ima, which was said to bear no small resemblance to Paradise. A vessel

*The Feminine and Masculine Islands.*

" These two islands were peopled in the year 1285, the one by men, the other by women only ; the two have communication with each other only once every year. They are Christians, and have a bishop dependent on the archbishop of Scoria \*.

*The Island Scoria.*

" This island is situate five hundred miles from the Feminine and Masculine Islands. The inhabitants are Christians, and are governed by an archbishop. Very good silk stuffs are manufactured there ; and much amber grows, as is related by Marco Polo in the 38th chapter of his third book.

" Item.—I must observe that the spices which are sold in the islands of the East Indies pass through a number of hands before they reach our country.

" In the first place the inhabitants of the islands called Great Java buy them in the other islands, where they are collected by their neighbours.

" Secondly, those of the island Seylan †, where St. Thomas was interred, buy them in the island of Java, and transport them to their own country.

" Thirdly, they are landed again in the island of Seylan, to be sold or exchanged with the merchants of the island Aurea, in the Chersonesus, where they are warehoused.

" In the fourth place, the merchants of the island Taprobane buy them in Seylan, and remove them thence to their own island.

" Fifthly, the Mahomedans resort to Taprobane from Aden, buy the spices, pay the duties, and transport them to their own country.

" Sixthly, the people of Algiers afterwards purchase them, and remove them, partly by sea, but a greater distance by land carriage.

" In the seventh place, the Venetians and others buy them of these people.

" Eighthly, the Venetians part with them in barter, or sell them to the Germans.

" Ninthly, they are then exposed for sale at Frankfort, Prague, and other places.

" In the tenth place, they reach England and France.

" The eleventh hands they pass through are those of the retailers, of whom, in

" The twelfth place, the consumer purchases them ; hence may be seen the great charges to which they must needs be subject, and the vast profit collectively deduced.

" Twelve separate gains are derived from them, exclusive of their being subject many times to a duty of one pound on ten of their value. It must moreover be noticed, that

vessel of good size being fitted out for the purpose, with all things proper and necessary, they embarked, the number of brethren being about ninety five, trusting and hoping at all times in Jesus Christ, whom, the only begotten of God the Father, the winds and seas eternally obey. After long wandering over the main, and a considerable time had elapsed without any accident befalling them, or loss even of one of their number, and after their search for the island had proved wholly fruitless, tired of their long voyage, doubling the Orcaades and the rest of the Northern Islands, they returned to their own country."

In chapter sixth, likewise is said —

" Machutus, being ordained a bishop, with his holy master Brandan, and other equally sanctified men,

brought to life after death, of whales, &c. The learned Jesuit, Godfrey Henschenius, who minimized the history of the life of St. Brandan, says, Cujus historia, ut fabulis reperta, omittitur.

\* Marco Polo writes Scoria.

† With Marco Polo, Seylam.

in the eastern countries years of dearth often occur, so that it is by no means surprising when the spices reach the consumer they should obtain almost their weight in gold. This is what Matteo Bartolomeo, a Florentine, relates, who returned from India in the year 1424 ; and who accompanied Pope Eugene IV. to Venice, and recounted to him what he had observed during twenty-four years residence in the East."

*Island Taprobane.*

" Many wonderful things are told respecting this island in ancient history, of the manner in which its inhabitants succoured Alexander the Great, and how they marched to Rome, and made alliance with the Emperor Pompey. This island is four thousand leagues in circuit, and is divided into four kingdoms, in which are a great quantity of gold, pepper, camphor, aloes, and gold dust. The people adore idols ; the men are of large stature, robust, and good astronomers.

*Island Madagascar.*

" The sailors in the Indies where Saint Thomas is buried, in the province of Moabar, generally go in twenty days from that country to the island of Madagascar ; but when they return home they are more than three months on the voyage, on account of the currents, which run very strong towards the south. This is what Marco Polo relates in his third book, chapter 39."

*Island Zanzibar.*

" This island, called Zanzibar, is two thousand leagues in circumference ; it is governed by its peculiar king, has a language of its own, and the islanders are idolaters. They are of extraordinary size, four times as strong as we are, and eat as much as five common men. They go entirely naked, are perfectly black, very ugly, have large long ears, enormous mouths, and frightful eyes, four times as large as men in general. Their women are equally shocking in appearance. These people live on dates, milk, rice, and meat. No wine is made among them, but they prepare a very palatable beverage from rice and sugar. They carry on a considerable trade in amber and ivory. Many elephants rove through the country, and on the coasts a number of whales are caught. Leopards, camelopardales, lions, and other animals, materially different from those of our country, are likewise taken in numbers. From the account of Marco Polo, Book iii. chapter 41."

*Island Scylan.*

" In the island of Seylan abundance of precious stones and eastern pearls are found. The king of this country possesses the largest and handsomest ruby that ever was seen. The inhabitants go entirely naked, the women as well as the men. The country yields rice, but no corn. The king is independent on any superior power, and worships idols. The island is two thousand leagues in circumference, according to Marco Polo, in the 21st chapter of his third Book.

" Some years back the great Cham of Cathay sent to the King of Seylan, and offered a considerable value for this ruby ; but the king returned for answer, that, as this stone had long pertained to his ancestors, he thought it would be unjust in him to deprive

deprive his country of such a treasure. This ruby is said to be a foot and a half long, a span in breadth, and without any flaw."

*Island Java Minor.*

" This island is two thousand Italian leagues in circumference, and contains eight kingdoms. The inhabitants have a distinct language, and are addicted to the worship of idols. The country produces all kinds of spices. In the kingdom of Boffman \* are many unicorns, elephants, and monkeys, with a human countenance. Item, no corn is grown on the island, but bread is made in it from rice; instead of wine the people use for drink a liquor which is extracted from trees. This is of a red as well as a white colour; it is tolerably pleasant to the taste, and is met with in great plenty in the kingdom of Samara. In the kingdom of Dageram † it is customary, when the idol affirms that a sick individual will not recover, to stifle him immediately after the oracle is delivered; his friends then cause his flesh to be cooked, and partake of it with much rejoicing, in order, as they say, that it may not become the food of worms. In the kingdom of Jambri ‡, the inhabitants of both sexes have a tail growing from their rump like dogs. In this kingdom is an extraordinary abundance of spices; and animals of all descriptions are found, such as unicorns, &c. In the other kingdom, called Fanfur, the best camphor in the known world is produced, which is sold for its weight in gold. Here also are large trees, from between the bark and the heart of which a kind of flour is collected; it serves to make bread, and is excellent food §. Marco Polo says, in the sixteenth chapter of his third book, that he resided five months on this island."

*Island Java Major.*

" After leaving the great country of Cathay, going by the way of the kingdom of Ciamba, and sailing fifteen hundred Italian leagues towards the east, you arrive at the island called Java Major, three thousand Italian leagues in circumference. The king of this island is tributary to no one, and adores idols. Here, all kinds of spices are found, such as pepper, nutmegs, mace, ginger, galanga, cloves, cinnamon; and all kinds of roots, which are transported thence to different quarters of the globe, and which render this country the resort of a number of merchants at all times."

*Island Angama ||.*

" In the 22d chapter of the last book of Marco Polo it is said, that the people of the island Angama have the head, eyes, and teeth of dogs; and that they are a very uncivilized and cruel race of men. They prefer human to other flesh, and eat rice cooked in milk in lieu of bread. They worship idols, and cultivate all kinds of spices in great abundance, as well as many fruits, peculiar to their country, and differing much from those which grow with us in the west."

\* Marco Polo writes the name of this kingdom Bafman.

† According to the above-noticed author, Dragoian.

‡ Called by Marco Polo, Lambri.

§ An erroneous account of the sago-palm.

|| Marco Polo writes Anganiam.

*Island Zipangu* \*.

“ The island Zipangu is situate in the eastern part of the globe ; the people of the country are idolators. The sovereign of the island is independent. The island produces an extraordinary quantity of gold, and contains all sorts of precious stones and eastern pearls. Thus much Marco Polo relates of it in his third book, chapter 2d.

“ Marco Polo likewise affirms in his third book, chapter 42, that sailors have truly observed that in this sea of India there are more than twelve thousand seven hundred inhabited islands, in many of which are found precious stones, fine pearl, and gold mines ; the inhabitants of them are men differing also from the generality of mankind ; but the detail of these matters would be too long to give in this place.

“ The sea here produces many wonderful things ; fyrens, for example, and other fish.

“ Those who are anxious of information respecting these singular people, and these extraordinary sea-fish, as well as the terrestrial animals, may consult the works of Pliny, Isidorus, Aristotle, Strabo, the Specula of Vincent de Beauvais, and other authors.

“ In their writings will be found a description of the inhabitants of the islands, of the sea, of many wonders ; and of their terrestrial animals, roots, precious stones, &c.”

*Island Candia*.

“ The island Candia, with all the other islands, as well Little Java as Angama, Neucuran, Pentham, Seylan, with all India Magna and the country of St. Thomas, are so much to the south that the polar star, which with us is called the arctic pole, is there never seen ; but in its stead another star is visible, called the antarctic ; hence these countries are exactly our antipodes, so that when day with us it is night with them, and when the sun sets with us it rises with them ; and half the stars which are beneath and invisible to us are seen by them : this therefore proves that the earth, with all its mass of water, was formed by God of a round figure, as is stated by Sir John Mandeville in the third part of his voyages.”

*Island Neucuran* †.

“ Marco Polo, in his third Book, chap. 20, says, the island Neucuran is situate a hundred and fifty Italian miles from the island Great Java, and that this island produces nutmegs, cinnamon, and cloves in abundance. In it are likewise whole forests of sandal wood, and all sorts of aromatics.

“ This island produces a great quantity of rubies, emeralds, topazes, sapphires, and eastern pearls.”

*Island Pentan* ‡.

“ On sailing towards the south from the kingdom of Loach, you arrive at the island Pentan, covered with forests of odoriferous trees. The sea which surrounds this island is

\* The author before noticed writes Zipangri.

† The Necuram of Marco Polo.

‡ Called Petan by the last quoted author.

only two fathoms deep, as is observed by Marco Polo, lib. iii. chap. 12. The great heat of the climate obliges the inhabitants to go entirely naked.

“ The people of this kingdom are imitated by those of the country of Vaar, who alike go without cloaths, and, as do the inhabitants of Pentan, adore an ox.”

*Island Coylur\*.*

“ In this island Coylur, Saint Thomas the Apostle suffered martyrdom.

“ Here, in the time of Sir John Mandeville, was found an island, the inhabitants of which had the heads of dogs; and here the polar star, called with us the arctic pole, is not visible. Those who navigate this sea are under necessity of using the astrolabe, as the compass in this part does not point.

“ All this country, and all these seas, with the islands and their kings, were given by the three holy kings to the Emperor Prester John. The inhabitants of almost all of these islands and countries professed Christianity at one time, but at present only seventy-two nations are Christian.

“ Those who inhabit these islands have tails like animals, according to Ptolemy, who makes this statement in his eleventh table of Asia.

“ These islands are ten in number, and are called the Manilla Islands. Vessels framed with iron cannot navigate among them, on account of the loadstone in them.”

*The River Ganges.*

“ In the book of Genesis is seen that the country through which the Ganges flows is called Havilah. Here should grow the finest gold in the known world. In holy writ, in the 3d Book of Kings, chapters ix. and x. it is said that King Solomon sent hither his vessels in search of this gold, as well as of pearls and precious stones, which he caused to be brought from Ophir to Jerusalem.”

*Tartary.*

“ Marco Polo (lib. iii. cap. 47.) says that, in the northern parts, among mountains and deserts under the arctic pole, dwell a people of Tartar race, called Permians. They adore an idol made of furs, and called Natigai. The occupations of these people are limited to repairing in summer northward to the arctic pole, where they catch ermines, martins, rein-deer, foxes, and other animals, on which they subsist, and the skins of which serve them for clothing. During summer they inhabit the country for the sake of hunting; and at approach of winter retire towards the south to Russia, where they dwell in caverns under ground to shelter themselves from the bleak wind called aquilo, and line their caverns, for warmth, with the skins of animals. With them in winter there is very little day, but in summer the sun never leaves them at night. In the very midst of summer some few herbs and roots grow with them, but the earth yields neither corn nor wine, on account of the intenseness of the cold.”

*Iceland.*

“ In Iceland fair men are found, who are Christians. The custom of its inhabitants is to sell dogs at a very high rate, while they willingly part with some of their children to merchants for nothing, that they may have sufficient to support the remainder.

\* By Marco Polo written Coylum; with this author moreover it is not denominated an island, but a kingdom of the island of Seylam, or Ceylan. On the globe of Behaim this island is a peninsula of Asia, in form of a peninsula.

“ Item.—In Iceland are found men eighty years old, who have never tasted bread. In this country no corn grows, and in lieu of bread dried fish is eaten. In Iceland it is the stock-fish is taken which is brought to our country.”

BESIDES this globe of Behaim there are moreover two other ancient globes in the library of the city of Nuremberg. They are executed each of them with much nicety, and the names of places are written on them. The most ancient of the two was made by John Schöner, the first professor of mathematics in the university of Nuremberg: he constructed it in Bamberg, at the expence of John Seyler, his protector; by whom, when he came to inhabit this city, it was brought hither. This globe is three feet in diameter, and bears an inscription in Latin verse expressive of the particulars related.

The author of the other terrestrial globe is unknown.

The year after Martin Behaim constructed his globe, Anthony Roburger caused geographical charts to be engraven on wood for the chronicle of Hartman Schedel.

In the library of Ebner there is a map of the world, designed and engraven on vellum in 1529, by Diego Ribera, the geographer of the King of Spain, with an explanation in the Spanish language. On it is marked in a very distinct manner the limits of the new world from the demarcation of Pope Alexander VI.

MARTIN II. Behaim was born at Nuremberg, probably in the year 1430. His father, Martin I. was a councillor of that city, in which he died in 1474, and was buried in the church of the Dominicans. His mother was Agnes Shopper, of Shopperhof. Martin Behaim had a sister and four brothers, the youngest of whom, Wolf, or Wolfrath, carried off the prize, at a tournament held at Nuremberg in 1503, and afterwards went to join his brother at Lisbon, where he died in 1507, and was buried in the church of our Lady of the Conception. The uncle of Martin Behaim, called Leonard Behaim, with whom he maintained a literary correspondence during four and twenty years, died in 1486. The son of this Leonard, Michel Behaim, born in 1459, died a senator of Nuremberg in 1511. At the house of this cousin Martin resided, when at Nuremberg in 1491 and 1492.

That certain writers\* assume the family of Martin Behaim to have come from Kramlau, in Bohemia, may be attributed, either to his ancestors being really Bohemians, that is to say of the circle of Pilsner; or from Martin himself, in his youth, having passed some time there for purposes of trade.

Philip Beroald the elder, and Regiomontanus, are reputed to have been the masters of Behaim†, but it would be difficult to prove that he was a disciple of Regiomontanus, whose real name was John Muller, who did not visit Nuremberg before the year 1471, and who, in 1475, went to Rome, where he died the next year.

\* Christoph. Cellarius, Hist. medii ævi, p. 213; Geog. Nov. p. 460, 1698.

† Olfert Dapper Beschryving van Amerika, Amsterdam, 1673, in folio, where Behaim is said to have been a scholar of Montecrivo or Koningberger.



And still less probable is it that he was a scholar of Beroald, who never quitted Italy except on occasion of a short visit to Paris; for it is merely conjectural that Behaim really went, as he once proposed, to Venice, in 1457, as also that he remained there till 1476; and the conjecture, as I have found by the correspondence he maintained with his uncle Leonard, is altogether ungrounded, seeing the interval between 1455 and 1479 (a circumstance hitherto not generally known) was spent by him, as was common enough among the nobility of that time, in commerce. Later than the date of the last of his letters from Antwerp, in the Low Countries, the 8th June, 1479, nothing is found respecting him. It is highly probable that in the year 1481 he had repaired to Portugal, where then reigned Alphonso V.

Before I proceed farther it may be proper I should controvert the tale which the writer of a German Dictionary \* has endeavoured to accredit, that it was Martin Behaim who, in 1460, discovered, under Isabella, widow of the Duke Philip III. of Burgundy, the island of Fayal, and that he peopled it with a colony in 1466. These facts are rather attributable to Job de Huerter, Lord of Moerkirchen, and father-in-law to our Behaim, as he expresses with sufficient perspicuity on his globe †. It was only in 1467 that Isabella became a widow; and her son, Charles the Bold, then thirty-four years of age assumed the reins of government immediately after his father's death. How is it possible then that Isabella, as regent, could have caused a vessel to be fitted out by Martin Behaim, who, in 1479, was still carrying on the linen trade, as appears by his letter of the 8th of June before quoted?

It was undoubtedly the Normans who first sailed to the Azores in the ninth century; and, according to the President De Thou, it was Jean de Betancourt who discovered these islands, to which afterwards the names Terceres was given, the Flemish Islands, and the Islands of Goshawks, (Ilhas dos Açores.)

The Portuguese, in 1418, discovered Porto Santo, and in 1420, Madera, the two Fortunate Islands.

In 1433 they doubled Cape Bojador, in Africa, before then regarded as the Ne plus Ultra of navigation. The Azores Islands were discovered in the following order:—

Santa Maria, the 15th August, 1432, by Gonzalez Velho Cabral. It was the first port made by Cristoval Colon, on the 13th February, 1493, when assailed by a tempest on his return from America.

San Michael, discovered likewise by Cabral, on the 8th May, 1444.

Tercera, discovered in the interval between the years 1444 and 1450.

Saint George, and La Graciosa, in 1450 and 1451.

It is not possible to fix with precision the date of the discovery of the islands Flores and Carvo; but it is ascertained that they were known in 1449.

Pico and Fayal were discovered by mariners from St. George and La Graciosa. The first colony by which these islands were peopled was composed of Flemings, who were brought to Pico by Job de Huerter, whose daughter Jane of Macedo afterwards became the wife of Martin Behaim.

Barros ‡, the chief historian of the voyages of the Portuguese, who knew nothing either of Stuvénius §, or Tozen ||, his opponent, says, on speaking of the proprietary of

\* Nurenbergischen Gelehrte Lexicon und Munzbelustigungen.

† See page 396.

‡ Decada i. lib. ii. cap. i.

§ Joh. Fred. Stuvénius, de vero novi orbis inventore, dissertatio historico-critica. Francof. ad Mœnum, 1714, 8vo.

|| Christoval Colon, the first who really discovered the new world, defended against the unfounded pretensions

of the Azores islands: "In the diplomatic archives is found that, in 1449, the King, Alphonso V. granted permission to Don Henry to send colonies to the seven islands of Azores, which had already been discovered. Thither sheep and horned cattle had already been transported, in consequence of orders from the same Infant, on board the fleet of Admiral Gonzalez Velho. In 1457, the King ceded to his nephew Don Fernan all the islands hitherto discovered, with full jurisdiction, but with some restrictions. In 1460, the infant Don Henry ceded to Don Fernan, his nephew and adopted son, the islands of Jesus and La Graciosa, retaining those only belonging to the order of Christ, of which he was the protector. The King ratified this cession at Lisbon on the 2d September, the same year."

Antonio Herrera, in his description of the Azores islands, published in 1582 and 1583, page 161, makes mention of their discovery, but says nothing of Martin Behaim.

In an old Dutch chart by Just Dankerts, the island Fayal is placed immediately below that of Flores. It owes its name of Fayal to the number of beech-trees upon it.

For the different discoveries, it is observable that foreigners were in general preferred\*: "Hence" says Barros†, "Antonio de Nolle, a fellow-countryman of Colon, was employed on occasion of the discovery of the island of Sant Jago, near Cape Verd, to the capitancy or government of which his successors were in part appointed; a certain Jean Baptiste, a Frenchman, was entrusted with the government of the island Mayo; and Job Dutra (the Portuguese manner of writing the name of De Huerter), the father-in-law of Martin Behaim, with that of Fayal." For this reason, near the island Fayal, flags are painted on the globe of Behaim, with, on them, the arms of the city of Nuremberg, and those of the family of Behaim.

In the life of the infant Don Henry‡ a very detailed account is afforded of the discovery and population of the Azores islands, in which however no mention is made of Martin Behaim. The person on whom, at that time, the island Fayal was bestowed is stated to be (page 335.) Jorge de Ultra, a Fleming of noble extraction; and it is further stated that it was he who first founded a colony there, the property in which was ceded to him by the Infant.

According to the most recent account we possess of the island Fayal§, its present population is fifteen thousand, dispersed through twelve parishes, a third part of the number in Horta, a town situate on the western side, with an excellent port. The inhabitants are reckoned to be an honest race, careful, laborious, and generally better clad than those of Madera. In this island wheat is cultivated, maize, and excellent flax, which grows to an unusual height.

It is not improbable that the name of Horta, given to this town, is derived from Huerter, who planted the first colony on the island Fayal; notwithstanding this term may be interpreted also to mean the Town of Gardens. Linschoten|| observes, that

pretensions of those who attribute the honour of the discovery to Amerigo Vespucci and Martin Behaim, by L. Tozen. (In German.) Gottingen, 1761. 8vo.

\* For the plainest reason; the Italians and Flemings, being the chief navigators and most experienced seamen, had the most ample knowledge at this time of the sea. ENG. TR.

† As Decadas iii. primeiras de Asia de Joao de Barros, l. iii. cap. ii. fol. 56. Lisbon, 1628.

‡ Vida do infante D. Henrique, escrita per Candido Lusitano. (Father Joseph, of the Congregation of Oratorians.) Em. Lisboa, 1758. 4to.

§ Afforded by Forster in the 2d vol. of the Voyage of Captain Cook round the World, in the years 1772 to 1775. || Navig. cap. xcvi. p. 118.

in his time the Flemish language was entirely lost among the inhabitants, who spoke the Portuguese only; though they received with partiality such individuals as came from the Low Countries, whom they regarded as the countrymen of their ancestors.

As Cristoval Colon resided in Portugal from 1471 to 1484, and as it appears very probable he was acquainted with Martin Behaim\*, I think it right to point out precisely the origin of the opinion that the latter participated in the discovery of America, and even of the Straits of Magellan.

Colon, a native of Terra Rossa, in 1471 married the daughter of the captain of a Portuguese vessel, called Bartolomeo Perestrella†, whom Prince Henry of Portugal had employed on his first expedition to the Indies. This young lady was denominated Philippina Moniz Perestrella. Colon, who thus became possessed of the nautical charts and journals of his father in law ‡, set sail for Africa, and from divers causes drew the conclusion that by sailing constantly westward, across the Atlantic Ocean, new countries would be discovered. In 1482 he laid his project before the senate of Genoa, his country §, but it was disregarded. In 1483, he consequently addressed himself to Don Juan II. King of Portugal, who, in his conception, was likely to comprehend it more fully; but at this court he was equally unsuccessful, as the project of Colon was formed, as pretended there, wholly on the reveries of Marco Polo respecting Cipangu, that is to say, Japan ||.

In Vasconcellos¶ are found the reasons which prevented Diego Ortiz, bishop of Ceuta, as well as the cosmographers Rodrigo and Joseph, from countenancing the propositions of Colon: their objections are chiefly to be attributed to the perfect ignorance of the Portuguese at that time of the countries in the western part of the globe\*\*.

This circumstance seems to prove that Martin Behaim, who at this period was at Lisbon, was intimate with Rodrigo and Joseph, and well known to Colon himself, en-

\* Possibly it might be from Behaim that Colon learnt that the sea had one day cast on shore at the Azores two dead bodies with extraordinarily large faces.

† Barros relates (Dec. i. lib. i. cap. 2.) that this Perestrella was first a gentleman belonging to the court of Don Juan, brother of Don Henry, and that, some little time before the beginning of the year 1430, the latter entrusted him with a vessel and people to colonize the island Porto Santo. Murr. The name Perestrella, it is highly probable, was given him in addition to that of Moniz, on account of his excelling in observance and knowledge of the polar star, and steering his vessel by its guidance, Perestrella, in Portuguese meaning, by the star. ENG. TR.

‡ This no doubt gave rise to the tale, that a certain captain of a ship, driven by the winds on to a country utterly unknown, died in the house of Cristoval Colon, and bequeathed to him the journal and charts of his voyage. Gomera cites this as a fact; Hist. de las Ind. part i. fol 10 a. Oviedo, in his Hist. Gen. de las Indias. Salamanca, 1545. lib. iii. cap. ii. fol. 3. a. insists upon this being merely an invention on the part of its author, copied by Benzon; while, on the other hand, Stuvénus has carried the point so far, not only to accredit the story, but even as to assume that this captain was Behaim himself. (Stuvénus, de Novo Orbis Inventore, c. p. vi. parag. v. and vi. p. 46.)

§ Herrera, Hist. de las Indias Occidentales, Dec. i. lib. i. cap. 7.; and Mr. Robertson, History of America.

|| Barros, As Dec. iii. primeiras de Asia. Dec. i. lib. iii. cap. 2.

¶ Vida del Re Don Juan el Segundo de Portugal. Madrid. 1639, lib. iv.

\*\* Colon had previously carried on a correspondence by letter in 1474, with Marco Polo, on the discovery of unknown countries in the western part of the globe. Marco Polo conceived that the first lands which would be discovered would be Cathay or China, and the empire of the Great Cham. See Herrera, Dec. i. lib. i. cap. 2. p. 3 and 4.; and in fact the representation of this country on the globe of Behaim exhibits no intervening space between Europe and Asia westward, Cathay being placed opposite to the Azores islands.

The Marco Polo alluded to in the preceding note, if the statement be not altogether a very gross misconception, on the part of Mr. Murr, of what he had read, cannot be the Marco Polo whose Travels are published, since he died before the end of the 13th century, his travels taking place in 1250 to 1270, two centuries before. ENG. TR.

tertained at that time no opinion of the discovery of a new world; as otherwise he certainly would have supported the project of Colon with his influence.

This great man left Portugal, indignant at the rejection of his project, and landed in Spain in 1484. At the same time he dispatched his brother Bartolomeo to Henry VII. of England. After the lapse of seven years, Colon, who had continually experienced disappointments, resolved on going to England to join his brother, of whom he had heard nothing in all the lapse of time which had taken place since their parting. Bartolomeo indeed had been captured, stripped, and kept in prison by corsairs for some years before he reached London.

The English editor of the voyage of Hackluyt cites the following verses, written on the chart of the terrestrial globe presented by Bartolomeo Colon to Henry VII. King of England, on the 13th of February, 1488.

Janua cui patria est, nomen qui Bartholomæus \*  
Columbus de Terrâ rubrâ, opus edidit illud  
Londiniis, anno Domini 1488, atque insuper anno  
Octavo, decimo die cum tertiâ mensis  
Februarii. Laudes Christo cantentur abunde.

Heaven, however, ordained that Spain should gather the fruit of the patient-bearing and researches of Colon. Don Juan Perez de Marchena, prior of the convent of Franciscans of Rabida, near Palos, a convent in which Colon had placed his children to be educated, entreated him to delay his departure for some days. He even had the boldness to address the Queen on the occasion, who was then at Santa Fé. Donna Isabella commissioned Perez to persuade Colon to have patience for awhile. After some time, the city of Grenada was taken, when Alonzo de Quintanilla, comptroller of the finances of Castille, and Lewis de St. Angel, receiver of the ecclesiastical revenues in Arragon, so earnestly entreated Isabella, that she consented to recall Colon, who, by this time, wearied of the long procrastination, had already sailed, and proceeded some leagues out to sea. He arrived the 17th April, 1492, at court, and a treaty was signed. The expence of the outfit amounted to no more than ninety thousand French livres of that day; and three wretched ships were entrusted to Colon. With these he sailed from Palos, the 3d August 1492, and fortunately he brought them back after making the discovery of the new world.

The original journals of Colon, Pinzon, Ovando, Balboa, Ponce de Leon, Hernandez de Cordove, Cortez, &c. are among the archives of the crown at Simancas, two leagues from Valladolid. The charters and diplomas which respect America, and which by the order of Philip II. were deposited there in 1566, occupy the largest room, and form eight hundred and seventy-three large packets, which Mr. Robertson sought in vain for permission to examine. It is, however, to be presumed that Herrera and Solis will have been more favoured, and have made every requisite extract. In addition, it is much to be desired that liberty were granted to explore the archives of the crown of Portugal at Torre do Tombo, as assuredly, some manuscripts would be found regarding Huertter de Moerkirchen, as well as Behaim and his sons.

\* Bartolomeo Colon, who was a good geographer, and perfectly acquainted with navigation, was still absent from Spain when his brother returned from America. Colon did not see him again for thirteen years. From England he repaired to Paris, where he first heard, from Charles VIII. of France, that his brother had effected the discovery of the New World. Before his second voyage, Cristoval left behind him a sealed letter addressed to his brother. Fernan of Spain gave him three vessels, and the two brothers met in the port of Isabella, in 1494. Colon nominated his brother Adelante, or Lieutenant-General of the Indies. Bartolomeo died in Hispaniola in 1514.

Before

Before he went to Portugal in 1480, Martin Behaim undoubtedly was conversant in the mathematics, and in nautical affairs; but on this account it does not naturally follow that he had been a disciple either of Regiomontanus or Beroald.

It is moreover perfectly clear that he was an excellent cosmographer, and that he participated in the discovery of the use of the astrolabe, or rather of the application of it to navigation, as is seen by the following extract from Emmanuel Tellefius Sylvius\*.

“ John II., that the unknown sea might be navigated with less danger, enjoined his physicians Roderigo and Joseph, in conjunction with Martin Behaim, men for that time deeply conversant in mathematics, to bend their studies to forming some means by which mariners might steer their ships, whether in our own or some new sea, with greater safety, and by which they might ascertain, by observations of known stars and known shores, in what latitude, and what part of the sea they might be. In consequence, after indefatigable study and long meditation, they made improvements on the astrolabe, an instrument previously used in astronomical observations; by which improvements, its utility was much increased, and the instrument made subservient to the art of navigation, to the great convenience of sailors. For this benefit is Europe indebted to John II.; a fact which no one can deny†.”

This fact is confirmed by Pierre Matthieu‡, and by the learned Jesuit Maffeus, in his History of the Indies§.

Were it a matter made evident that our Behaim had for instructor the celebrated Regiomontanus, who resided at Nuremberg from 1471 to 1475, one should have ground for supposing that from him it was that he acquired his information respecting the use of the meteoroscope, or the instrument adapted to the ascertainment of latitudes and longitudes by means of the stars||, which Regiomontanus fancied he had discovered from a passage in Ptolomey, (Geog. lib. i. cap. 3.) as he relates in a letter to Cardinal Bessarion. Regiomontanus likewise wrote a treatise on the armillary astrolabe, which is found in the edition of his works printed at Nuremberg in 1554¶. Notwithstanding this it is fair to presume that Behaim succeeded in perfecting the use of the sea-astrolabe, as is more lately observed by Mr. Wales\*\*, who looks upon him

\* In his work *De Rebus gestis Johannis II. Lusitanorum Regis* (Hagæ Com. 1712. 4to. p. 99.) cited by Gebauer. *Histoire de Portugal*, p. 123. Tellefius Sylvius is the only Portuguese writer who mentions Behaim.

† The original runs as follows: “ Ut minore cum errandi periculo ignotum mari navigari potest, Roderico et Josepho, medicis suis nec non Martino Bohemo, ea ætate peritissimis mathematicis, injunxit Johannis II. ut adhibito inter se consilio, excogitarent aliquid, quo nautæ cursum navium, licet in nostro novoque pelago, tutius dirigerent, ut vel abstracti a notis sideribus, cognitisque litoribus, quam cœli ac pelagi partem tenerent, aliquo modo cognoscerent: ii post indefessum studium longamque meditationem astrolabium, instrumentum, quod ante astronomiæ tantum inserviebat, utiliori invento ad navigandam artem, maximo navigantium commodo, transulere; quod beneficium tota Europa Johanni debere, inficiari non potest.

‡ In *Notis ad Jus Canonicum ad VII Decretal.* LI. tit. IX. de Insulis Novi Orbis, p. 80. edit. Francop. 1590. fol.

§ *Hist. Indiz*, lib. i. p. 51. edit. Venetæ, in 4to. He died in 1603.

|| *Johannis de Regiomonte. Epist. ad reverendiss. pat. et dom. Bessarionem card. Nic. ac Constantinop. de comp. et usu cujusdam meteoroscopi.* This letter is found at the end of the works of Werner, published in folio at Nuremberg in 1514, and reprinted in 4to. in 1537. Werner himself wrote five books on different meteoroscopes invented by him, the manuscript of which at his death fell into the hands of George Hartman, who in 1542 made a present of it to the celebrated mathematician George Joachim, surnamed Rheticus.

¶ *M. Joh. Regiomontanus. Scripta de torqueto, astrolabio armillari, regula magna Ptolomaica baculoque astronomico, et observationibus cometarum.*

\*\* Original astronomical observations, made in the course of a voyage towards the south pole, and round the world, in His Majesty's ships the *Resolution* and *Adventure*, 1772—5, by William Wales, F. R. S. and William Bayly. London, 1777, in 4to.

to have been a scholar of Regiomontanus. Notwithstanding this possible error, that writer appears to have had more knowledge of the Cavalhero Behaim than Robertson.

In proportion to the truth of the fact that Martin Behaim participated in the invention and adaptation of the astrolabe for observations at sea, is the falsity of the tale, founded on a badly interpreted passage in the chronicle of Schedel, that it was he who first discovered the Azores, and conducted thither a colony of Flemings on his second voyage to the Atlantic Ocean; that he sailed as far as to the Strait of Magellan; and that he, owing to a chart of his, seen by Magellan in the cabinet of the King of Portugal, gave origin to the voyage in which this strait was explored.

This supposed fact was first bruited by Wagenfil, in his *Sacris Parentalibus B. Georgio Fred. Behaimo dicatis* (Aldorfii, 1682, in fol. p. 16, 17.); but more especially in his *Pera librorum juvenelium*. (Synops. Historiæ Universalis, part iii. page 527. Norib. 1695, in 8vo.) in which he says,—

“ Christopher Columbus, of a Placentine family, born at Palestrella, but afterwards an inhabitant of the Genoese territories, when first he visited the island Madera, where he occupied himself in planning and delineating geographical charts, whether of his own accord, as he was a man well informed in what regards astronomy, cosmography, and physics, whether actuated by some intimations from Martin Bohem, or as the Spaniards affirm, from a pilot named Alphonso Sanchez de Helba, who by accident had touched at an island, afterwards called Dominica, meditated a voyage to Western India.

“ The preceding paragraph I adduce, in common with Ricciolus in his excellent work of *Geographia et Hydrographia reformata* \*; and here an apt opportunity occurs of publishing a pleasing fact hitherto in concealment, which adds to the celebrity not only of Nuremberg, my birth-place, and one of the first of cities, but also of all Germany; and of which to keep the world longer in ignorance would be a culpable neglect. Of a certainty, this Martin Bohem, who Ricciolus thought it probable had generated in Columbus the project of that fortunate expedition which terminated in the discovery of the islands of the new world, was a citizen of Nuremberg, of the ancient and noble family of Behaim, a family which others have been accustomed and still are wont to pronounce Bohem, and the stem of which has lately been raised to baronial dignity. He was the son of Martin and Agnes, the daughter of Sebald Schopper. As from his earliest youth, he had been accustomed with the most diligent attention not only to trace the surface of the earth, and the disposition of its lands and seas, but also to contemplate the heavens and the stars, he framed at length the result of his studies into a work which he tendered to Isabella, the daughter of Juan King of Portugal, who, after the death of her husband Philip of Burgundy, surnamed the Good, had the administration of affairs; he even obtained from her a ship, in which, after navigating beyond the utmost boundaries then known of the western ocean, he first discovered the island Fayal, called thus from the abundance of beech-trees found upon it, which in the Portuguese language have the term *fayas*. He also afterwards explored the more distant islands, and gave to the whole the denomination *Azores*, from the number of hawks which built their nests there (the Portuguese calling these birds by that name); in these islands he left colonies of Flemings, whose descendants are yet found in the islands: hence the Azores have likewise been called the Flemish Islands. Proceeding further over the Atlantic Ocean, he arrived at those islands which



Columbus afterwards explored and made public. What I have advanced in this paragraph is from documents of undoubted veracity in the archives of the republic of Nuremberg\*.

"I have obtained further information from the archives belonging to the family of Behaim, among which are a likeness of Martin Behaim, and a terrestrial globe made by him, on which but a small portion of the American continent is laid down, but many islands of that division of the earth spread through a great extent of sea, though without any denomination. Authentic documents exist also among them, by which it appears that Martin married Jane de Macedo, the daughter of a Portuguese captain, and that he died in the year 1506, leaving behind him a son who returned to the possessions of his family at Nuremberg.

"Moreover, the Emperor Maximilian I. an admirer of the venturesome expeditions of Martin, thus expresses himself regarding our navigator: 'No citizen of the empire ever travelled more than Martin Bohem, or explored more distant regions.'

"Johannis Metalius Metellus, in his *Speculum Orbis Terræ*, towards the end of the work makes mention of an hydrographic table preserved by Emmanuel King of Portugal, in his museum, in which the site of the Molucca Islands is marked.

"A memorable passage also occurs in a book of Cardinal Æneas Sylvius, on the State of Europe under the Emperor Frederic III. cap. 44. corroborative in a degree of what I have advanced. The passage runs thus:

*'In the year of our Lord M,CCCC,LXXXIII. John II. King of Portugal, a man of great spirit, fitted out certain galleys, furnished with all necessaries, and sent them beyond the columns of Hercules on a voyage of discovery towards Ethiopia. He moreover gave the command of these to two captains, Jacob Cam, a Portuguese, and Martin Behaim,' &c.*

This last passage is an extract from the chronicle of Schedel, and was not inserted by the professed author of the book in question until long after the death of Pius II. an event which happened in 1464. I shall here present the entire passage from the manuscript written by Schedel himself, preserved in the library of the city of Nuremberg. In the edition of Roburger, who printed this work in 1793, when Martin Behaim resided in Nuremberg, it occurs page ccxc.

"The Infant Henry observing how narrow the limits of the kingdom of Portugal, and solicitous of extending them, by the persuasion of certain geographers was induced to the exploration of the Spanish Ocean, and discovered many different islands never inhabited before by man. Among others, he sailed to a famous island, which he found, much to his satisfaction, though wholly unpeopled by men, was extremely fertile, covered with wood, abounding in springs, and well adapted to the support of man. Hither he sent men of different nations for the purpose of putting it in culture. Among other articles which it was suited to produce was sugar, which is now made here in such abundance that it has become more plenteous than heretofore throughout all Europe: the name of this island is Madera, whence the denomination of Madera sugar. He likewise discovered many other islands, which he caused to be peopled with Christians; for example, those of St. George, Fayal, and Pico, of one of which, productive of wheat, he made a grant to certain Germans to be peopled with Flemings. In aftertime, that is to say, in the year 1483, John II. King of Portugal, a man of great spirit, fitted out certain galleys, furnished with all necessaries, and sent them to

\* Fol. nimirum 119 vol. membran. de Patriciorum Noriberg. orig. et fol. 285. T. I. *Annalium Norib. MS.*



explore the country towards Ethiopia, beyond the columns of Hercules. He moreover gave the command of them to the two captains, Jacob Cam, a Portuguese, and Martin Bohem, a German from Nuremberg, of a good family in Bohemia, a man expert in geography, well capable of bearing with patience the toil of a sea life, well read in the latitudes and longitudes towards the west of Ptolomey, and used to long voyages. These two, by the help of the gods, ploughing the sea at short distance from shore, having passed the equinoctial line, entered the nether hemisphere, where, fronting the east, their shadow fell towards the south, and on their right hand. Thus did his industry throw open a new world hitherto unknown, and which none for many years before had attempted to explore, except the Genoese, who failed in the attempt. The object of the voyage being now effected in this manner, in the twenty-sixth month from their departure the navigators returned to Portugal, though not without losing a number of men, who died from the extreme heat of the weather. As a token of their success they brought back with them pepper, grains of paradise, and many other articles too numerous to mention. Owing to the discovery of this new world, a great quantity of pepper is brought to Flanders; and although it may not be so wrinkled in its exterior as the pepper from the east, it possesses the pungency, is of the same form as, and answers all the purposes of, the real pepper. Much might be written on this subject, which, lest I should be tedious, I omit."

Although the chronicle, from which this extract is given, be in the hand-writing of Schedel, the extract itself is added in a different hand. In the manuscript German translation of this book by George Ult, which he finished the 5th October 1493, these lines do not appear; they must therefore have been added since that time.

The whole, however, that can be gathered from this passage is, as is justly remarked by Councillor Gebauer and Professor Tozen, "that the King of Portugal, John II. in 1483, dispatched James Cam, a Portuguese, and Martin Behaim of Nuremberg, with some galleys, on a voyage to Ethiopia; that they entered the South Sea, keeping at a short distance from shore; that after passing the line they arrived in the other hemisphere, where, when they looked towards the east, their shadow fell on their right hand; that in this hemisphere they discovered countries before unknown, which, for many years before, none but the Genoese had attempted to explore, and they in vain; finally, that after a voyage of twenty-six months they returned to Portugal, and, as a proof of the truth of the relation they gave of their voyage, brought back pepper and cardamoms.

Who, on reading this passage with attention, a passage inserted in the book written by Æneas Sylvius, *De Europæ sub Frederico III. Imperatore Statu*, and which he extracted from Schedel, who, I say, but must perceive that it does not relate to the part of the globe to which afterwards the name of America was given, and particularly not to the Brazils. It is well known that Diego Cam extended the navigation of the Portuguese, who before had never sailed further than Guinea, and that as early as 1484, (and not in 1490) he discovered the kingdom of Congo; a discovery to which I shall hereafter allude in speaking of the voyage of Martin Behaim off the coast of Africa.

To these passages, wrongly interpreted, are to be attributed all the falsities with which the history of our celebrated navigator is disfigured. Some writers, not content with affirming that he was the first who discovered America, ascribe to him likewise the discovery of the famous Strait of Fernan Magellan, achieved by the latter in 1419. It is Postell who first advanced these assertions. In two of his works he gives *Fretum Martini Bohemi* to the Strait of Magellan. It is possible he may have

have gathered the tale from Jerome Benzon, whose book was not published at the time of Postell advancing the assertion. In his *Cosmographica Disciplina*, he says \* :—

“ With the very slight exception of the lands immediately under, or adjacent to the south pole, and the Chamasian and South Atlantic promontories, opposite to each other, beyond the equators, this stretching as far as 54 degrees, the latitude of Martin Bohem's Strait, denominated by some the Strait of Magaglan from the Portuguese of that name, and that to 35 degrees, the parallel of the Cape of Good Hope, the whole face of the earth, intersected only by two divisions of the sea, may be said to spread almost uninterruptedly from east to west, and be prominent towards the northern part of the globe.

In the first book *De Universitate*, the following passage occurs :—

“ There is a portion of land hitherto undiscovered at the Nadir or on the meridian which forms the antipodes of our regions, which, however it may be, whether or not pertaining to the Atlantic continent, being almost adherent to it at Martin Bohem's strait, we annex to that land which forms a part of the new world †. In the second book Postel repeats what he had said before : “ But the new world,” he says, “ stretches from pole to pole uninterruptedly except where the connexion is broken by Martin Bohem's Strait, at 55 degrees beyond the equator, through which Strait Magalen passed to circumnavigate the world, and from which he failed to the Moluccas ‡.”

After the publication of this book of Postel, Benzon produced his *History of the New World* §, which he dedicated to Pope Pius IV. This book was printed at Geneva in Latin, in 1578, 1581, 1586, 1600, and 1670, in 8vo. under the title *Novæ Orbis Historiæ*, &c. Benzon likewise translated this book into French, and editions in that language in 8vo. appeared in 1579 and 1580. It was published in German at Basle, in folio, in 1579; in Dutch at Amsterdam, in 4to. 1650. It was likewise given in English at London, in folio, in 1625; and is inserted book iv. page 1448, of the new edition of Purchas's *Collection of Voyages*, published also in London, 4to. 1773.

In the work of Benzon himself no mention is made of Martin Behaim, but he is alluded to in the Latin remarks of Chauveton, in words of which the following is a translation :—

“ The exploration of this Strait is to be attributed to Magellan, for the commanders of the other vessels were of opinion that the sea here afforded no passage, and merely opened into a bay Magellan however knew that it was a strait, owing, as is said, (this he might have heard from Postel) to his having seen it laid down in a sea chart of that celebrated navigator Martin Bohem, preserved in the museum of the King of Portugal ||.

This statement was copied by Theodore de Bry, in his *America* ¶, and is inserted in the French translation of Benzon, 1579 \*\*. From Chauveton also, Metellus, who is quoted by Wagenfeil, extracted the observation, and in short all succeeding authors, the one copying the other. Indeed Chauveton is the person who has given the greatest

\* Published at Basle in 4to. and Lugd. Batav. 1636, 16mo. edit. tert. c. ii. p. xxii.

† Guliel. Postelli. de Universitate liber. Parisiis, 1563, 4to. lib. ii. Lugd. Batav. 1635, edit. tert. lib. ii. p. xxxvii.

‡ Ibid. p. clvi.

§ *Novæ Orbis Historiæ*, i. e. *Rerum ab Hispanis in India Occidentali hæcenus gestarum, et de acerbo illorum in eas gentes dominatu libri tres*, primum ab Hieronymo Benzone, Italico sermone conscriptæ, nunc in Latinum translata et notis illustratæ ab Urbano Calvatone.

|| See book i. of the *Voyage* by Figafetta, page 316. where this statement is made by Figafetta himself; see also the remarks of Signor Amoretti, parag. xii. of the *Introduction to the Voyage*. ENG. TRANS.

¶ *Francof. ad Mœn.* 1594, 1596, and 1599, in folio, part iv. p. lxi.

\*\* Page cxxiv.

currency to this tale of the discovery of the Strait of Magellan by Behaim. Not the slightest indication of any such strait is visible on the globe constructed by Behaim, in 1492; it is even altogether unlikely that after his return to Portugal, or rather to the island Fayal, Behaim could have had any knowledge of a strait unthought of by any navigator before Magellan, and consequently previous to the year 1519.

Marco Antonio Pigafetta in like manner gave currency to the tale of the discovery of America by Behaim in his *Itinerario*. (Londra, 1585, 4to.) I am ignorant whether or no any mention be made of Martin Behaim in his *Relazione di Congo e delle circconvicine contrade*, tratta dagli scritti e ragionamenti di Odoardo Lopez, Portogheze, per Philippo Pigafetta; (Roma. 1591, fol. fig.) for I have not seen the book.

When therefore we read in the Gottingen Almanac that "Cristoval Colon, a Genoese, discovered, in 1492, the fourth division of the globe, to which posterity ungratefully have given the name of America, from Americo Vespucci, a Florentine," and that "the family of Behaim, at Nuremberg, lay claim to this honour, which they attribute to one of their ancestors named Martin Behaim, relying chiefly on the testimony of Pigafetta, a Spanish writer of that time. At least it appears indisputable that this Martin Behaim discovered the Brazils in 1485, under the reign of John II. King of Portugal. He died at Lisbon in 1506."—When, I say, one reads this passage, one can but feel surprise that, in 1778, it should be pretended Pigafetta was a Spanish writer, and that Behaim discovered the Brazils in 1485.

Barros, who gives an exact account of the expedition of Magellan \*, says not a single word of Martin Behaim, or his chart.

Following chronological order, we must now pass to the testimony of Herrera, a Spanish author. This excellent historian advances, on simple hearsay, that Behaim was a Portuguese, born in the island Fayal, one of the Azores, and that it was him who confirmed Colon in his project †; it is moreover merely from rumour that he ascribes in part to him the discovery of the Strait of Magellan ‡.

Varenius § fixes the date of the discovery of the Strait of Magellan, in the year 1513, and attributes it to one Vasquez Nunez de Valboa. "Magellanus," he says, "first discovered and sailed through it in the year 1520; though before him, that is to say, in the year 1513, Vascus Nunius de Valboa is said to have had an idea of its existence || when on a voyage to this part for the purpose of exploring the southern region." It is this same Vasquez also, and not Martin Behaim, to whom Varenius adverts in the paragraph that follows in the fourteenth chapter, written to prove that the ocean flows constantly from east to west within the zone called the Torrid, that is, between the two tropics. This is the translation of the passage: "Thus the sea is stated to run with a strong current from east to west through the Strait of Magellan, whence Magellan, (or he who, as some affirm, discovered it before him), conjectured it to be a strait by which the Atlantic communicated with the Pacific Ocean."

Jan Wuelser ¶ asserts the same in speaking of Behaim as was advanced by Wagenfeil, after examining the papers of the family in the archives of Nuremberg. But the history and the globe of Behaim controvert all these pretended facts, and shew that he had no

\* Decada terceira, lib. v. cap. viii. ix. x. folio 139—148 Lisboa, 1628 folio.

† Ant. de Herrera, Dec. i. lib. i. cap. ii. p. iv. Y esta opinion le (Colomb.) confirmó Martin de Bohemia, Portugues, su amigo, natural de la isla de Fayal, gran cosmografo.

‡ Decad. ii. c. xix. p. lxvi.

§ Geog. gen. c. xii. p. vii. et c. xiv. prod. vii. p. 110. Napoli.

|| "Illa anima vertisse dicitur" is the expression. ENG. TRANS.

¶ Orat. de Majoribus Oceani Infulis. Nuremb. 1691, 8vo. 98—102 Omnis de claris quibusdam. Norimb. p. xiii.

knowledge whatever of America. Still by this declaration I do not mean to infer but, within the time between 1494 and 1506, during which he resided at Fayal, he might have had some information respecting the new world, and even the Strait of Magellan.

Messrs. Schwartz \*, Moerl †, Bielefeld ‡, Fuerer §, and Will ||, adduce nothing on the principal point which materially differs from what is found in Wagenfeil, Wuelfer, Stuvénius, and Doppelmayr.

Had writers looked into Spanish and Portuguese authors they would not have published so many erroneous statements respecting Martin Behaim.

The name of Martin Behaim is not to be found in any Portuguese work, that alone excepted of Manuel Tellez de Sylva ¶, and in no one in the Spanish tongue but in the two passages of Herrera, before alluded to, in which his name is stated to be Martin de Boheme, that he was by birth a Portuguese, and born in the island of Fayal, an error copied by Mr. Robertson in his History of America.

Martin Behaim was at Antwerp in the month of June of the year 1479; and in this city it doubtless was that he became acquainted with some of the Flemings resident in the island Fayal, that del Pico, or that of Job de Huerter; and shortly afterwards in all likelihood he went to Portugal, where he was so highly esteemed on account of his knowledge of cosmography, as to obtain a post in the fleet designed for a new voyage of discovery off Africa, under the command of Diego Cam, the proposals of Colon having been rejected the year before, owing to the king preferring real advantages to projects which were regarded at best as doubtful.

The crusades had afforded to Europeans frequent opportunities of visiting the coasts of Africa. The Normans, in 1365, attempted to ascend the Senegal River with a view of avoiding the duties paid at Alexandria, but it was the Infant Don Henry \*\* who, by his glorious enterprize, was the principal instigator of after maritime expeditions, by doubling Cape Bojador, and by his discovery of the Azores Islands.

King John II. shortly after his accession to the throne in 1481, caused twelve vessels to be equipped for the purpose of following up previous discoveries. This fleet was entrusted to Don Diego Dazambuya. The Portuguese constructed, on the coast of Guinea, Fort St. George de la Mina, with permission of Caramansa, the sovereign of the country, and in aftertime transmuted it into a town.

Martin Behaim, from his own observance in person at the time, has indicated a number of places discovered on the second expedition, in 1484. I shall enumerate here the names of the whole of them along the coast of Africa.

\* Differt. de Columnis Herculis, Altdorfii, 1749, 4to. parag. ult. Popowitsch has likewise thrown light on this passage, in his Researches relative to the Sea. Nurem. 1750, p. xxxi.

† Don Joh. Sigism. Moerlii Orat. inaug. de Meritis Norimbergensium in Geographiam; in the Museum Noricum, p. cxxiii. (Altdorf. 1759, 4to.)

‡ De Bielefeld. Progrès des Allemands dans les Sciences, les Belles Lettres, et les Arts, ch. iii. des Inventions and des Decouvertes des Allemands, p. 48—52.

§ Joh. Sigism. Fuerrei, Oratio de Martino Behaimo, in Mus. Nor. p. ccclxxxv.—cccc.

|| In Nurenbergischen Gelehrten Lexicon, book i. p. lvi. and in the Mundtsbelustigungen.

¶ Note, see page 409. of this work.

\*\* The Infant Don Henry Duke of Viseu was the fourth son of John I. by Philippina of Lancaster, sister of Henry VI. of England. He died 13 November, 1463, though Vasconcellos pretends his death took place ten years earlier. See Barros, Decad. i. lib. i. cap. xvi.]

## NORTHERN COAST OF AFRICA.

Targa, Alcadia, One, Oran, Bones, *Alger* \*, Bogia, Bona Bezzert, Cartago, Sieffa, Comerar, Affrica, Kathalia, Tunis, Ptolemais, Sultan, a King of the Holy Land, a Prince possessed of many kingdoms in Arabia, Egypt, and at Damascus.

Tripoli, Barbarum, Brata, Las Vechas, Cafar, Tosar, Dibrida, Bayda, Modebare, Ptolemais, Vefeli, Salmos, Cazalles, Porta Ruraiba, Torre de Lorabo, Porto Vejo, Alexandria, Egyptus.

## THE COAST OF AFRICA TO THE CAPE OF GOOD HOPE.

Castel del Mare, Agilon, *the kingdom of Morocco.*

Deserta, Cabo Boffador.

Lazzaron, FOUR ISLANDS.

Altas Montes Torre Darem, Giefo, Bon, Rio de Oro, Cabodo Barbaro, San Mathia.

Cabo Bianco, *Castel d'Argin*, Rio de San Johan, *Genea*, the King Burburram † de *Genea* (Guinea) the kingdom of Organ. The Moors of Tunis travel as far as to this country with caravans for silver. Ponta (a promontory or tongue of land) da Tofia, Os Medos, Sancta in Monte, Anteroti, As Palmas, Terra de Belzom, Cabo de Cenega, Rio de Cenega, Rio de Melli.

Cabo Verde, Rio de Jago, Rio de Gambia; the King Babarin de Gambia Galof, Bogaba, de Sayres, Rio Grande, Rio de Cristal, Rio de Pischel.

Sera Lion. From this country cardamoms are imported into Portugal, Rio de Galinas (Hen River) Rio de Camboas.

Rio de Forzi al Barero, Rio de Palma, Pinias. Terra d' Malaget (Cardamom Land) Cabo Corfo, Angra (Bay) Uqua, Rio de Sant-Andrè, Ponta da Redis (Redis Point), Seria Morena, Angra de Pouaraca, *Castel de Loro*, Resgate de Nave, Olig de Saint Martin, Bon de Nao, Rio de San-Johan-Baptista, Tres Pontas, Minera Quuri, da Volem, Angra Tirin, Villa Freinta, Terra Bara, Villa Longa.

Ripa, Monte Rafo, the kingdom of Mormelli; in this kingdom does the gold grow which is sought for by order of the King of Portugal.

Rio Largo. This river is eighteen hundred Portuguese leagues or miles, or twelve hundred German miles from Lisbon. Rio de Sclavos, Rio de Forcada, Rio de Ramos, Rio de Behemq, Cabo Formoso, Tierra de Pencto, Rio da Sierra, Angra de Stefano, Golfo de Grano, Rio Boncero. The country of the King of Furfur, where pepper grows, discovered on account of the King of Portugal in 1485.

*Cicurlus equinoccialis.*

Cabo de las Marenas (opposite to the) *Insula do Principe.*

Serra di San Dominico, Angra do Principe, Alcazar, Rio de Furna, Angra da Bacca, Terra de Estreas (opposite to the) *Insula Sancti Thomæ* †.

Rio de Santa Maria Cabo de Santa Catherina, Capo Gonzalc, Rio de San Mathia, Oraia de Judeo, Beia Descira, Rio de Sant-André (opposite to the) *Insula Martini* (Four

\* All given here in *italics* is written on the globe of Behaim in larger characters, and with a deeper coloured red ink. The kingdom of Congo or Zaïra as it is sometimes denominated, is not marked on this globe.

† Bor-biran. Barros, Dec. i. lib. iii. cap. viii.

† This island, and those Do Principe and Anno Buon, were discovered under Alphonso V. in 1472, according to Barros. Decad. i. lib. ii. cap. ii. which however contradicts a former assertion of Martin Behaim, in which he states it to have been discovered in the year 1484.

Islands). *Item, in this country it is summer when winter reigns in Europe ; and all the birds and quadrupeds are different from ours. Here also much amber grows, called in Portugal, algalbia.*

Cabo de Catherina, Serra de Sancto Spirito, Praia (bank) de Imperator, Ponta de Bearo, Angra de Santa Marta, *Golfo de San Nicolo*, Serra Corafo da Corte Reial, Golfo de Judeo, Ponta Formosa, Deferta d'Arena, Ponta Bianca, *Golfo de San Martin*, Ponta Formosa, Golfo das Almadias, *Rio de Patron*, Rio Ponderoso, Muoruodo, Rio da Madalena, Angra and Rio de Fernande, Ponta de Miguel, Infula de Capre. Inland are moreover written, *Luna montes, Abasia Ethiopia, Agisfinba. Here is a sandy and arid country called the Torrid Zone, badly peopled, save in that part where water is found.*

Cabo Delta, Ponta Alta, o Gracil, Castel Podoroso de San Augustino, Angra Manga, Cabo de Lion, Rio Certo, Terra Fragosa. This is the Cape, denominated of Good Hope by Juan II., otherwise called the Cape of Storms. Here the Portuguese flag is painted, and above it a vessel with the following inscription :—

“Here the columns of the King of Portugal were raised on the 18th January, in the year of our Lord 1485.”

“In the year from the birth of J. C. 1484, the illustrious Don Juan, King of Portugal, caused two vessels,” &c. (See page 397).

The remainder of the coast, as far as *Sinus Lagoa*, is laid down in the following order :—

Monte Nigro (by the side of it) Lacarto, Narbion, Agisenba, Bluffa, Ricon, Cabo Ponero, Terra Agua, Rio de Bethlehem, Pouarazoni, Angra de Gatto, Roca, Rio de Hatal, Orenas, San Steffan, Rio dos Montes, Rio de Requiem, *Cavo Ledo*, Rio Tucunero, Prom, San Bartolomeo Viego. *In this country the inhabitants have summer when it is winter in Europe ; and when summer reigns with us, it is winter with them.* Beneath the inscription there is also a ship painted, with these words :—

*Oceanus maris asperi Meridionalis.*

“Thus far the vessels of the Portuguese advanced ; here they erected their column, and by the end of nineteen months returned to their own country.”

I deem it expedient to throw some additional light on the places marked on the globe of Behaim, from what is mentioned by Barros \*. The King ordered that columns of stone, twice the height of a man, on which the arms of Portugal were sculptured, should be taken on board the two vessels. Till this period, Cape Saint Catherine was the extremity of the coast explored. Diego Cam or Can proceeded as far as to the mouth of the Zaira, and erected the columns, which occasioned the river to be known for a long time by the name of the River of Columns (it is the *Rio de Padrono*, called by Behaim *Rio do Patron*), and discovered the kingdom of Congo.

The *Ponta Formosa* of Behaim † was no doubt the island discovered by Fernan del Po, in 1485, and which received his name. There is some doubt also respecting the Angra and Rio Fernande, marked on the globe of Behaim.

Martin Behaim likewise makes mention of two caravellas ‡. These two vessels were commanded by Diego Cam and Juan Alphonso Davero, or Daveiro §. This latter commander discovered the kingdom of Benin, two hundred miles from Fort St. George de la Mina, and brought the first Guinea pepper to Portugal. Behaim marks down Angra de Gatto (Cat Bay), where, according to Barros, a factory was established.

\* Decad. i. lib. iii. c. ii.

† See page 416.

‡ See page 397.

§ Vasconcellos, Vida y Acciones del Rey Don Juan el Segundo, lib. vi.

The kingdom of Organ of Behaim is called by Barros (chap. iv.) the kingdom of Ogan.

Behaim by his globe appears to have had some idea of Ethiopia, a country the exploration of which was further pursued under Bartolomeo Dias, in 1486, and laid down chiefly from the maps of Africa of Ptolomey, especially the western part of that country. Dias moreover, jointly with his brother Peter and the Infant Don Juan, discovered the Cape of Good Hope, which however they did not double.

In 1485 Martin Behaim was made a knight of the order of Christ by the King; but it is not possible this event should have taken place, as affirmed in a certain German manuscript of that time, on the 18th February; for a month earlier than this date he was on board the fleet off the point of Africa. Refende \*, who has mentioned the most minute circumstances that related to the reign of Juan III., says nothing of this creation, though he has not omitted to detail the honour and dignities heaped on Don Gonzale Vas de Castelbranco; but he, as well as Barros, Vasconcellos, and many other writers, are silent respecting Behaim, who was the cosmographer of the fleet, on which too, very possibly, his father Job de Huerter was embarked. According to a family tradition the King of Portugal, in a letter addressed to Behaim in his own hand writing, is reputed to have said: "Having so long observed your integrity, we are induced to believe that wherever you may be there is ourself;" &c. † a circumstance which seems incredible, seeing the chief historians of Portugal are wholly silent on the subject.

Portugal was not ungrateful to the Germans, who had been useful in promoting its prosperity. On the 2d February, 1503, Wolf Holzshuer, a patrician of Nuremberg, as a reward for his courage and the importance of his services, received a diploma, by which King Emanuel allowed him to bear on his shield a Moor's head and the cross of the order of Christ; and this grant was afterwards ratified by Charles V. in 1547.

It does not seem likely that Martin Behaim failed with the after-expeditions to Africa ‡. He remained at Fayal, where, in 1486, he married the daughter of Job de Huerter, who in 1489 gave him a son, Martin III.

In 1491, or perhaps in 1490, our cavalheiro repaired to Nuremberg to see his family.

On the 3d August, 1492, Colon set sail from Palos, and discovered the island Lucaya, called also Guanahani, to which he gave the name of San Salvador. In a very useful work printed not long ago at Venice, allusion is made to our Behaim. "There are" it says, "some who believe Colon to have been instigated to think of the new world from a casual sight of some foreign charts *designed either by some friend*, by MARTINO ANDALOUZA 'a Cantabrian, by a Portuguese of unknown name, or by ALPHONSO SANCHEZ DE HUELBA an Andalusian §." On the 3d March of the following year Colon entered the port of Restelo (now Belem) on the Tagus; but he left it shortly after,

\* Chronica que tracta da vida e das grandissimas virtudes do christianissimo Dom Juano o Secundo deste nome. Feyta por Garcia de Refende em Lisboa, 1596, folio, cap. lix. p. 39. b.

† Quia perspecta nobis jam diu integritas tua nos inducit ad credendum quod ubi tu es, est persona nostra, &c.

‡ In the month of May, 1487, Pedro de Cavillham and Alphonso de Payva sailed on new discoveries. They took with them a chart which had been made from a map of the world by Cassadillo Bishop of Viseo, an excellent astronomer. This chart it might probably be which was suspended in the cabinet of Don Emanuel King of Portugal, and attributed to our Behaim.

In 1488 Vas de Cunha and Don Juan de Bemoin were sent to construct a fort on the river Sanaga; but the attempt did not succeed. In 1495 the King dispatched Ruiz de Souza to Congo.

§ Fasti Novi Orbis, et ordinationis apostolicarum, ad Indias pertinentium, breviarum cum annotationibus. Opera D. Cyriaci Morelli, presbyteri, olim in universitate Neo-Cordubensi in Tucumania professoris. Venitiis 1776, 4 May, p. lxi.



after having had an audience of Juan II. who received him in a very gracious manner, and opposed no obstacle to his return to Spain.

Martin Behaim in 1492 finished his terrestrial globe at Nuremberg, a work he had been induced to by the entreaty of the three chief magistrates of that city; and in 1493 he arrived safe in Portugal, whence he went to join his father in law in the island Fayal.

The King, Don Juan II. reposed great confidence in our cavalhero. In 1494 he sent him to Flanders to his natural son Prince George, to whom he wished the crown to descend, which however devolved on Don Emanuel, his sister's son. Behaim on his voyage hither was so unfortunate as to be captured at sea and carried to England, where he fell sick. Recovering, after three months he again embarked, and was a second time taken by a cruizer and carried into France. After paying his ransom he repaired to Antwerp and Bruges, whence he wrote an account of these mishaps to the Senator Michael Behaim his cousin, his letter bearing date 11th March, 1494. This letter however he did not forward until his return to Portugal, whither he was hastily recalled.

After the death of Don Juan, which happened on the 25th October, 1494, no mention occurs of Behaim until 1506, the year of his death. In the interval it follows that he maintained no epistolary correspondence with his family, having already received from it all he had a right to expect.

The Emperor Maximilian rendered the following honorable testimony of the voyages of Behaim: "Martino Bohemo nemo unus Imperii civium magis umquam peregrinator fuit, magisque remotas adivit orbis regiones."

In this interval voyages of discovery still continued to be repeated with success, and in 1496 Vasco de Gama doubled the Cape of Good Hope.

In 1499 Don Emanuel (who was born in 1469 and died in 1521), projecting the conquest of the east, entrusted the expedition and command of the fleet to Vasco de Gama\*.

Vincent Yanès Pinzon, on the 26th of January, 1500, discovered the Cape *da Consolacion* or St. Augustin, and shortly after the mouth of the Maragnan or River of the Amazons†.

"On the second expedition in 1500, *Petro Alvaro Caprali* being chief, was discovered the Terra da Santa Cruz, vulgarly called the Brazils. This is the statement of Vasconcellos‡, and Barros states that the Brazils were discovered the 24th April, 1500§.

"In 1501 the King, Don Emanuel, sent Americo Vespucci to make new discoveries in the South Sea. This navigator had the good fortune on the 1st April, 1502, to make the first discovery|| of the coast of the province now known by the denomination of *Terra Firma*.

In 1505 Peter de Anaya made the Portuguese acquainted with Monomotapa.

It seems as if after his return Martin Behaim renounced all new enterprizes, and this chiefly owing to his advanced age. In 1506 he sailed from Fayal to Lisbon, where he

\* P. Antonii Vasconcelli, S. J. *Anacephaleoses*, i. e. *Summa Capita actorum regum Lusitaniz*. Anto. 1621, 4to. fig. pag. 265.

† Emanuel Rodriguez, S. J. *Relacion del Maragnan y del Amazonas*.

‡ Vasconcellos, *Anacephaleoses*, &c.

§ Barros, Dec. i. lib. iv. c. ii. Cyr. Morelli S. J. *Fasti*, Novi Orbis, p. 10.

|| Mr. de Murr is certainly in error here; for, according to the best historians, Rodriguez de Bastidias and Juan de la Cosa were the first who, sailing on a course directly west, reached the coast of Paria, and continuing the same direction discovered the province of Terra Firma, with all the coast from Cape Vela to the Gulf of Darien. It is true Vespucci followed the same tract without knowing this, and saw the same shores, but this happened after the exploration of the two navigators alluded to. AMORETTI.

died on the 29th of July in that year \*, as is proved by authentic documents. The statement therefore on the achievement placed by his son Martin on the right of the great altar in the choir of the church of Saint Catherine, at Nuremberg, that this event took place on the 15th July, 1507, is erroneous. Martin Behaim was buried in the church belonging to the Dominicans at Lisbon.

The family possesses a very handsome portrait of Martin Behaim; another of inferior antiquity below it bears the following inscription :—“ *Martinus Bohemus, Noriberg. Eques, Serenissimorum Johannis II et Emmanuelis Lusitaniæ Regum Thalassus, et Mathematicus insignis. Obiit 1506, Lisbonæ.*”

\* Martin Behaim was born in 1436, he was consequently seventy years of age when he died.

# AUSTRALASIA.

## INTRODUCTORY OBSERVATIONS

*From the Work of the President DE BROSSES \*.*

1616.] **T**HAT we may leave nothing unattempted that may further the knowledge of the regions hitherto spoken of, we shall include in this article such imperfect notices of the Dutch navigations to the Terra Australis, as we have been able to pick up, though few of them are very considerable, or of length sufficient to form separate journals. Though the principal discoveries of these vast regions, which lie to the south of the Molucca Islands, are undoubtedly due to the Dutch navigators, yet we have but very few of their journals, as they have industriously concealed from other nations, and even from their own countrymen, the informations brought by their navigators, for the reasons we have already mentioned in our first book. Were we possessed of the journals of those Dutch seamen who have visited the coasts of the southern regions, they would afford us many useful hints respecting geography, and other objects of curiosity. The best thing we have of this sort, is the chart given by Thevenot, at the end of Pelsart's journal, in the first volume of his collections. This journal, and that of Abel Tasman, the reader will find below, in the order of time. But we see, by Thevenot's preface, that he had in his possession several other journals relative to the same subject. "The Terra Australis (says he), which makes a fifth part of our globe, has been discovered at different times. That part of it, called Witlandt, was first seen in 1628. The land of Peter Nuytz the 16th of January 1627, Diemen's Land in November 1642, and New Holland in 1644. The Chinese were well acquainted with this country formerly, for we find Marco Polo, the Venetian, mentions several great islands lying to the south-east of Java, which he must have learned from the Chinese, as well as what he says of Madagascar; for this nation did what the Europeans do now, traversing all these Indian seas, quite to the Cape of Good Hope, to extend their commerce, or to make new discoveries. Pelsart, whose relation is subjoined, was thrown on this coast more by accident than design; but we shall give afterwards the voyages of Charpentier and Van Diemen, to whom the principal honour of this discovery belongs. He brought away with him gold, china-ware, and other curiosities, which made people at first imagine that these were the produce of the country, whereas they were in truth part of the cargo of a carrack which had been shipwrecked on that coast. People imagine this country to be very rich, because the

\* Hist. de Nav. translated by Callander.

Dutch make a great mystery of whatever concerns this navigation. And why should they be so careful in concealing it, did the country produce nothing worth the trouble of making so long a voyage? We also know, that they once sent troops to form a settlement here; but they found a stout resistance from the natives, who, ill armed as they were, resisted the Dutch with great vigour, advancing into the water to hinder their landing. On their return, they reported that they found the savages to be eight feet high. Pelfart says nothing of their extraordinary size, and perhaps the Dutch, being heartily frightened, thought the savages much taller than they really were." Unluckily Thevenot did not fulfil his promise with regard to Carpentaria, which is a large country, and lies in the ordinary tract of navigation to the eastern islands, in latitude 10 degrees south. Thevenot, at the time of his death, was preparing a fifth volume of his collection, some imperfect sheets of which were found in his study, containing the journals of Pelfart and Tasman. But there was nothing to be seen respecting Carpenter or General Diemen (in case it be true that Diemen had preserved any journal of his voyage), or if ever Thevenot was possessed of such manuscripts, they are now lost. In short, we have nothing of any length on this subject, except the journals of Pelfart and Tasman. We, indeed, see in the new history of voyages, published at Amsterdam in 1718, a sort of memorial concerning the land discovered by Nuytz, tending to prove, that as this country is situated in the fifth climate, between 34 and 36 degrees latitude, it must be one of the most temperate and fertile regions on the globe. It is added, that this memorial was thought to have been drawn up by order of the celebrated Law, to inspire the French with a taste for new discoveries. The conclusion drawn from the situation of this country is certainly just; nor can we see any reason for the suspicion of some who have thought that this region has only of late been left bare by the ocean, since it was first seen by Nuytz in 1627.

New Holland is that vast region which extends from the 6th to the 34th degree of south latitude, and from longitude 124 degrees to 187. To the north it has the Molucca islands, or the sea of Lanchidol. To the west and south the Indian ocean, and the Pacific to the east; but, in this immense stretch of land, we are acquainted only with some parts of the coast lying separate from each other, without being able to affirm whether they compose one continent, or (as it is more likely) whether they are large islands separated from each other by canals or arms of the sea, the narrowest of which have been supposed by navigators to be the mouths of rivers. Neither are we yet assured, whether or no New Holland joins New Guinea on the north, or Diemen's Land on the south. Tasman has verified by his course, that New Zealand, lying to the south-east, is totally separated by the sea from the continents and islands that lie nearer the equator. The principal countries of New Holland that we are yet acquainted with are Carpentaria to the north-east, the coast of which, forming a great bay, faces to the west. At the entry of this bay are the Molucca islands; to the north lie the lands of Arnheim and Diemen, which last is different from the Diemen of Abel Tasman. To the north-west lies the land of De With. Towards the west lie Endracht or Concordia, Edels, and Lewin's Land. This last occupies the point on the south-west. To the south lies the land of Peter Nuytz, and further south, but treading eastwards, the land of Diemen, if, indeed, this last should be comprehended under the division we are now describing.

In running along the east coast of this country, back towards the equator, we find the Terra Australis del Espíritu Santo, discovered by Quiros. But all the vast interval, lying betwixt Lewin and Quiros's discovery, is so little known, that we cannot tell what

what part of it is land, and what is sea. This tract extends from latitude 43 degrees south, to latitude 19 degrees, and has not hitherto been visited, at least as far as we know. Wischer tells us, that, in going to the East Indies, several have run along the coast of this new world, by keeping their course due east from the Cape of Good Hope, till they fell in with the coast of New Holland. This was the course Dampier followed, as we shall see in his journal. The Dutch navigators, abundantly occupied in securing their other possessions in the East Indies, have done little more than give names to the principal capes, bays, and rivers they fell in with along this coast, never staying longer here than was absolutely necessary to get the refreshments they wanted, and these (says Paulmier) were always furnished readily by the inhabitants. He adds, that the Dutch have often wintered on these coasts, and spent time enough among the natives to enable them to give us very particular accounts, both of them and their country, if the East India Company, for interested reasons, had not hindered them. Nay, we find a Dutchman offering the same thing, in his preliminary discourse to the northern voyages, "Il est certain (says he) que les Hollandois ont fait des tres grandes decouvertes du côté des Terres Australes inconnues, quoiqu'ils ne les aient presque pas publiées jusqu'à présent. Ce silence mystérieux, et ce que l'on a dit des richesses de ces terres, fait croire que les Hollandois n'ont pas à cœur la recherche des Terres Australes, craignant peut-être qu'il ne prit envie à des étrangers de s'y établir, au prejudice du negoce de leur compagnie." That this is the real nature of their conduct we may be assured from their hard usage of Le Maire, and the bad reception Dampier met with in the isle of Timor, not to mention many other instances, equally well known, and universally detested.

1606.] We find in Saris's Journal, preserved by Purchas, under this year, an account of a small vessel, called the Little Sun, being sent by the Dutch from the Molucca islands for the discovery of New Guinea; which country (says Saris) they knew nothing of at that time; but where they imagined gold was to be found. In the following year (says Saris) I was told by a Chinese captain, just come from Banda, that the Dutch vessel had put in there on her return from New Guinea. The crew gave an account, that having made a descent on the coast in order to learn something of the country, the natives received them with a shower of arrows, which had killed nine Dutchmen. They represented these people as very barbarous, and even cannibals; and being afraid to stay longer on these inhospitable shores, they returned without doing any thing.

1616.] The first land discovered this year was that called Concordia or Endracht, by Theodoric Hertog, a native of Endracht, who landed there in the month of October. This coast lies from 19 to 25 degrees south latitude. The principal inlet here, called Sharp's Bay, abounds with sea-dogs; and the great ledge of rocks, lying off the most southern part of the coast, is called the Abrolhos of Frederick Houtman. The river, or rather strait, to the northward, goes by the name of Jacob Remessens, in nearly 22 degrees south latitude: this country has since been seen by Pelsart and Dampier, as we shall find in their journals.

1618.] This year one Zeachen, a native of Arnheim, discovered the land called Arnheim and Diemen about the latitude 14 degrees. Diemen owes its name to Anthony Van Diemen, at that time general of the Dutch East India Company, who returned to Europe with vast riches in 1631. It is to be supposed that, during his stay in the Indies, he had greatly promoted the discovery of the southern world, as we find the navigators imposing his name on many of the capes, rivers and bays of that country.

In 1619. John Edels coasted the western shore to the southward, and left his name to it. Edel's land lies nearly in 39 degrees south.

In 1622, was discovered that point where the land makes a turn from west to south-east in 35 degrees south latitude. To this was given the name of Lewin, or the Lionels, probably because this was the ship's name. Du Quesne was upon this coast afterwards in the year 1687; and we are told that one Flamming, a Dutchman, with three ships, touched here in 1697, and found several good havens and rivers well stored with fish in latitude 31 degrees 30 minutes. We shall give below, in the order of time, what we could recover of his journal. This part of the coast has been little visited since.

In 1628, William de Witte gave his name to that part of the coast he surveyed in 22 degrees south latitude, to the north of the river Remessens. Here it was too, that in the same year, Viane, a Dutch captain, was shipwrecked, being thrown on this coast while he was passing the dangerous Strait of Bali, to the east of Java.

In this year too (and not in 1662, as Prevost says) Carpentaria received its name, from one Carpenter, a Dutchman, and governor of the India Company. He discovered it during his government, and returned with five ships very richly laden to Europe, in June 1628. It would seem that this whole coast has been carefully examined by the Dutch, as in Thevenot's Dutch charts, we have the names, in that language, of a great many bays, capes and watering places along it. At last, in the year 1664, this vast region received the name of New Holland, which it still bears in all the maps.

Before we quit this subject altogether, it may not be amiss to give the reader a general view of the adjacent lands, which he will find more fully described in the journals that are to follow. We find towards the south-east, Diemen's Land, and New Zealand, discovered by Tasman in 1642. This navigator, with two ships, sailed from Batavia, and in less than a year safely made the tour of what we call Australasia. His course was judiciously conducted, and happily directed. We see by his voyage, how easy it is for the Europeans, who possess establishments in the East Indies, to visit and discover all those vast regions, with very little charge or trouble. Tasman touched at Diemen's Land, November 24. The part that he ran along extends from latitude 41 to 44 degrees, and from longitude 166 to 169 degrees. New Zealand is more extensive: its coast facing the west, runs north and south, from latitude 33 to 44 degrees. Tasman only viewed this coast, without landing on it. The Abbé Prevost tells us, that the Dutch visited this coast again in the year 1644, but gives us no account of the captain's name, nor any extract from his journal. By some strange mistake he adds, that this land extends from latitude 44 to latitude 64 degrees, that is, almost to the polar circle.

We have seen before how New Guinea, lying north of Carpentaria, was discovered in the year 1527 by Alvar de Saavedra. This long island (or rather peninsula, if it touches New Holland, which is yet uncertain) lies obliquely extended from the equator to latitude 10 degrees south. Its northern extremity, and several islands along the coasts, are inhabited by a nation called Papoos. This people are thought such good soldiers, that the Mahometan kings of the neighbouring islands often hire them for soldiers. We find from De Lisle's chart of the East Indies, the following names of four little states in this country, Mian, Missol, Ogneo, and Noton. Argensola, in his second book of the history of the Moluccas, mentions four kings of the islands inhabited by the Papoos, Vaigamano, Vaigeo, Quibibio, and Mincibio, who entered into a league formed by the several states of this Archipelago, to support each other against the

the tyranny of the Portuguese. The Dutch continuator of Argenfola, in his 15th book, mentions a war in the island Ceram, carried on by the Papous, in conjunction with those of Ceram, against some islanders in the neighbourhood. These facts prove that the Australasians, who lie near the equator, are more civilized than such as are found further to the south, and their manners are much the same with those of the adjacent islands. Argenfola tells us, that, according to the tradition of the Moluccas, this country was first peopled from the island Ternate, which is not improbable. The Indian fable Argenfola mentions of the origin of this nation from four eggs, merits no more attention than the ancient story of the Phœnicians, Egyptians, and Chaldeans, of a primitive egg, whence all things were formed, according to them. One thing, however, is remarkable, and might be supported by many facts, were this a proper place for such disquisitions, that most of the ancient traditions of the Egyptians and Phœnicians were first derived from India and those countries that lie near to the equator.

We shall add here such general hints concerning these southern regions, from the Dutch writers, as we have been able to pick up, though we depart from the chronological order hitherto followed, and which we intend to pursue in the course of this work, with regard to such writings as deserve the name of journals.

We find in a Dutch book printed at Amsterdam 1753, in quarto, written by Nicolas Struyk, several geographical observations on Australasia, but laid down in a very irregular manner. We shall here see from the very words of this writer, that it is not without good reason that the Dutch are accused of willingly leaving the knowledge of this country very imperfect.

This treatise says nothing of the natural history of this country, nor of the manners of the inhabitants, two essential points, which Dampier (as we shall see when we come to his two journals) has explained as fully as he possibly could. But how seldom do we meet with such journals as Dampier's! He was right in his conjecture, that this land was nothing but a great number of islands, and those openings taken by former navigators for rivers, were really arms of the sea dividing these islands. The figure he gives to the peninsula inhabited by the Papous, joining to New Guinea, and extending in length from south-east to north-west (such as it is generally represented in our charts) is pretty good, excepting that its north-west extremity is only a chain of islands, and not a peninsula. We come now to give a few extracts from the Dutch author.

Though we are sometimes possessed of maps and accounts of new discovered countries, yet there may be many reasons for not publishing them to the world. First, because we incline to reserve such countries for our own use, and prevent the approach of other nations to them. Secondly, these discoveries may be yet too imperfect, and we wait to have them completed. Or, thirdly, this sometimes never happens, because people do not chuse to lay out large sums in fitting out vessels for discovering countries, the products of which, perhaps, may yield no profit to the adventurers. Be this as it may, it is certainly injurious to mankind in general, to conceal any thing from them that tends to illustrate so useful a science as geography is.

1697.] The 3d of May 1697, three Dutch vessels left the Texel, with orders to examine the west coast of New Holland; and they run along it from the island called Rottenest to the river William. An account of this voyage\* was published at Amsterdam in the year 1701, but without a map. They had sight of these southern regions

\* We have never been able to meet with a copy of this journal, otherwise we should have inserted it in its place.



December 29th, and they continued on these coasts to February 1698. According to their account, it is the most miserable country on the globe; so that Dampier had reason to say, that the Hottentots of the Cape were lords when compared to the inhabitants of New Holland.

1705.] The first of March 1705, three Dutch ships sailed from Timor, with orders to examine the north coast of New Holland more exactly than had hitherto been done. They noted the shoals, bay, and rocks upon this coast. In their route they met with no lands, excepting some rocks lying above water in 11 degrees 52 minutes south latitude. They saw the west coast of New Holland in 4 degrees to the east of the east point of Timor. Hence they continued their course to the northward, passing by a large shoal which lies above water in some places, and extends more than five German leagues. Hence they stood to the east along the coast of New Holland, observing every thing as carefully as possible. But this is all the account we can give of their discovery.

In this year 1705, the Dutch also sent out a yacht, called the Yellow Pinton, for the discovery of the south-east coast of New Guinea, the situation of which they found very different from what it is represented in the common maps. They mention their having found several places inhabited, such as what they called Red Point; another at a place called Waba; another at Green Point, where they found good anchorage and fresh water. Here one of their sailors was killed by the natives. From another place they brought away four men and three women. Two of the men escaped, and they set the women at liberty. Le Brun, a famous painter and traveller, being at Batavia, when this vessel returned, has given us the figure of one of these savages drawn from life, with his bow and arrows in his hand, in his second volume p. 338.\*

The isle of the Papous, near New Guinea, belongs to the King of Tidore. Valentine, in his account of the East Indies, Part III. p. 47, speaks so confusedly of this district, that it appears his knowledge of it was but imperfect, and his chart of it is very faulty. He lays down the west part of that country as totally unknown, and places on the north shore many of the names that belong to the south. The ordinary maps lay down the land of the Papous as contiguous to New Guinea, in which they are generally followed for want of better information. But it is now known, that this district is composed of many islands, the northernmost of which lie within our hemisphere. These isles extend over three degrees of latitude, from the continent of New Guinea to the island Halamahera, commonly called Gilolo, and by the savages, "The Mother of Countries," to distinguish it from the small isles which lie round it. Dampier's chart is not good, where he represents the southern islands of the Papous as making part of the continent of New Guinea.

The isles called Aroua belong to Banda, and ever since the year 1623 they have been under the dominion of the Dutch East India Company. These isles are well laid down in D'Anville's map of Asia, published in the year 1752; only he mentions but four, when in reality there are six of them. Arou is a low flat country, intersected with several salt creeks, the banks of which are covered with mangroves.

\* It is remarkable, that the figure of this savage from New Guinea, as given by Le Brun, perfectly resembles that of the African Negroes, though these two countries lie at a vast distance from each other, and the interjacent regions are peopled with inhabitants of a quite different form. We shall have occasion to assign afterwards the most probable causes of this wonderful resemblance betwixt two nations who still continue in the original state of savage nature, and can never be supposed to have had any intercourse with each other. Probably it was from this resemblance of the inhabitants of this part of Australasia to the African Negroes, that this country received the name of New Guinea.

These islands are well peopled; for some time ago, they counted seventy different towns or habitations. Their principal produce is sago, and the slaves they make in New Guinea and elsewhere, which they bring to sell in Banda \*. There is found, near the village of Ablinga, a bank on which they fish for pearl, but they are small. The bird of paradise is also found in those islands. In the year 1703 there were about 240 Christians in Aroua.

Thus far our Dutch geographer, whose informations, though of no great value, we have inserted, that we might not be accused of omitting any thing that may tend to the improvement of navigation, and the geography of these countries. The rest of his piece contains nothing but a dry catalogue of the names imposed by the Dutch navigators on the different capes, mountains, and islands; but this becomes of small use, as the Dutch writer, by a strange neglect, has omitted the latitude and longitude of the places he names; so that this catalogue can be of very small if any use to the navigator. We return now to our original plan, of giving the several voyages made towards the southern regions, in the order of time in which they were performed; and as our seamen began now to be more exact in their observations, our readers will peruse with more pleasure, and greater profit, the history of their voyages. To these we shall join such remarks, as the importance of the subjects, or credit of the relaters may call for; and thus we hope to render this collection more worthy of the regard of the public, as well as more useful (which is our great aim) to the judicious seamen.

\* Here we have another instance of the conformity of manners betwixt the Negroes of Africa and those of New Guinea, as well as in their equally wanting two of their fore-teeth. It would seem, however, that this race of men is very ancient in the southern hemisphere.

## VOYAGE OF FRANCIS PEISART TO AUSTRALASIA.\*

1628.] **I**T has appeared very strange to some very able judges of voyages, that the Dutch should make so great account of the southern countries as to cause the map of them to be laid down in the pavement of the Stadt-house at Amsterdam, and yet publish no descriptions of them. This mystery was a good deal heightened by one of the ships that first touched on Carpenter's land, bringing home a considerable quantity of gold, spices, and other rich goods; in order to clear up which it was said, that these were not the product of the country, but were fished out of the wreck of a large ship that had been lost upon the coast. But this story did not satisfy the inquisitive, because not attended with circumstances necessary to establish its credit; and therefore they suggested, that instead of taking away the obscurity by relating the truth, this tale was invented in order to hide it more effectually. This suspicion gained ground the more, when it was known that the Dutch East-India Company from Batavia had made some attempts to conquer a part of the southern continent, and had been repulsed with loss, of which, however, we have no distinct or perfect relation, and all that hath hitherto been collected in reference to this subject, may be reduced to two voyages. All that we know concerning the following piece, is, that it was collected from the Dutch journal of the voyage. And, having said thus much by way of introduction, we now proceed to the translation of this short history.

The directors of the East India Company, animated by the return of five ships, under General Carpenter, richly laden, caused, the very same year, 1628, eleven vessels to be equipped for the same voyage; amongst which, there was one ship called the Batavia, commanded by Captain Francis Pelsart. They sailed out of the Texel on the 28th of October 1628; and as it would be tedious and troublesome to the reader to set down a long account of things perfectly well known, I shall say nothing of the occurrences that happened in their passage to the Cape of Good Hope; but content myself with observing, that on the 4th of June, in the following year 1629, this vessel, the Batavia, being separated from the fleet in a storm, was driven on the Abrollos or shoals, which lie in the latitude of 28 degrees south, and which have been since called by the Dutch, the Abrollos of Frederic Houtman. Captain Pelsart, who was sick in bed when this accident happened, perceiving that his ship had struck, ran immediately upon deck. It was night indeed; but the weather was fair, and the moon shone very bright; the sails were up; the course they steered was north-east by north, and the sea appeared as far as they could behold it covered with a white froth. The captain called up the master, and charged him with the loss of the ship, who excused himself by saying he had taken all the care he could; and that

\* From Callander's Translation of De Brosses.

having discerned this froth at a distance, he asked the steerfman what he thought of it, who told him that the sea appeared white by its reflecting the rays of the moon. The captain then asked him, what was to be done, and in what part of the world he thought they were? The master replied, that God only knew that; and that the ship was fast on a bank hitherto undiscovered. Upon this they began to throw the lead, and found that they had forty-eight feet water before, and much less behind the vessel. The crew immediately agreed to throw their cannon overboard, in hopes, that when the ship was lightened, she might be brought to float again. They let fall an anchor however; and while they were thus employed, a most dreadful storm arose of wind and rain; which soon convinced them of the danger they were in; for being surrounded with rocks and shoals, the ship was continually striking.

They then resolved to cut away the main-mast, which they did, and this augmented the shock, neither could they get clear of it, though they cut it close by the board, because it was much entangled with the rigging; they could see no land, except an island, which was about the distance of three leagues, and two smaller islands, or rather rocks, which lay nearer. They immediately sent the master to examine them, who returned about nine in the morning, and reported that the sea at high water did not cover them, but that the coast was so rocky and full of shoals that it would be very difficult to land upon them; they resolved, however, to run the risk, and to send most of their company on shore to pacify the women, children, sick people, and such as were out of their wits with fear, whose cries and noise served only to disturb them. About ten o'clock they embarked these in their shallop and skiff, and, perceiving their vessel began to break, they doubled their diligence: they likewise endeavoured to get their bread up, but they did not take the same care of the water, not reflecting in their fright that they might be much distressed for want of it on shore, and what hindered them most of all, was the brutal behaviour of some of the crew that made themselves drunk with wine, of which no care was taken. In short, such was their confusion, that they made but three trips that day, carrying over to the island 180 persons, 20 barrels of bread, and some small casks of water. The master returned on board towards evening, and told the captain that it was to no purpose to send more provisions on shore, since the people only wasted those they had already. Upon this the captain went in the shallop to put things in better order, and was then informed that there was no water to be found upon the island; he endeavoured to return to the ship in order to bring off a supply, together with the most valuable part of their cargo, but a storm suddenly arising, he was forced to return.

The next day was spent in removing their water and most valuable goods on shore; and afterwards the captain in the skiff, and the master in the shallop, endeavoured to return to the vessel, but found the sea run so high, that it was impossible to get on board. In this extremity the carpenter threw himself out of the ship, and swam to them, in order to inform them to what hardships those left in the vessel were reduced, and they sent him back with orders for them to make rafts, by tying the planks together, and endeavour on these to reach the shallop and skiff; but before this could be done, the weather became so rough, that the captain was obliged to return, leaving, with the utmost grief, his lieutenant and seventy men on the very point of perishing on board the vessel. Those who were got on the little island were not in a much better condition, for, upon taking an account of their water, they found they had not above 40 gallons for 40 people, and on the larger island, where there were 120, their stock was still less. Those on the little island began to murmur, and to complain of their officers,  
because

because they did not go in search of water in the islands that were within sight of them, and they represented the necessity of this to Captain Pelsart, who agreed to their request, but insisted before he went to communicate his design to the rest of the people; they consented to this, but not till the captain had declared that, without the consent of the company on the large island, he would rather, than leave them, go and perish on board the ship. When they were got pretty near the shore, he who commanded the boat told the captain, that if he had any thing to say he must cry out to the people, for that they would not suffer him to go out of the boat. The captain immediately attempted to throw himself overboard, in order to swim to the island. Those who were in the boat prevented him; and all that he could obtain from them was, to throw on shore his table-book, in which he wrote a line or two to inform them that he was gone in the skiff to look for water in the adjacent islands.

He accordingly coasted them all with the greatest care, and found in most of them considerable quantities of water in the holes of the rocks, but so mixed with the sea water, that it was unfit for use; and therefore they were obliged to go farther. The first thing they did was, to make a deck to their boat, because they found it was impracticable to navigate those seas in an open vessel. Some of the crew joined them by that time the work was finished; and the captain having obtained a paper, signed by all his men, importing that it was their desire that he should go in search of water, he immediately put to sea, having first taken an observation, by which he found they were in the latitude of 28 degrees 13 minutes south. They had not been long at sea, before they had sight of the continent, which appeared to them to lie about sixteen miles north by west from the place they had suffered shipwreck. They found about twenty five or thirty fathoms water; and as night drew on, they kept out to sea; and after midnight stood in for the land, that they might be near the coast in the morning. On the 9th of June, they found themselves as they reckoned, about three miles from the shore; on which they plied all that day, sailing sometimes north sometimes west, the country appearing low, naked, and the coast excessively rocky; so that they thought it resembled the country near Dover. At last they saw a little creek, into which they were willing to put, because it appeared to have a sandy bottom; but when they attempted to enter it, the sea ran so high that they were forced to desist.

On the 10th, they remained on the same coast, plying to and again, as they had done the day before; but the weather growing worse and worse, they were obliged to abandon their shallop, and even throw part of their bread overboard, because it hindered them from clearing themselves of the water, which their vessel began to make very fast. That night it rained most terribly, which, though it gave them much trouble, afforded them hopes that it would prove a great relief to the people they had left behind them on the islands. The wind began to sink on the 11th; and as it blew from the west-south-west, they continued their course to the north, the sea running still so high, that it was impossible to approach the shore. On the 12th, they had an observation, by which they found themselves in the latitude of 27 degrees; they sailed with a south-east wind all that day along the coast, which they found so steep, that there was no getting on shore, inasmuch as there was no creek or low land without the rocks, as is commonly observed on sea-coasts; which gave them the more pain, because within land, the country appeared very fruitful and pleasant. They found themselves on the 13th in the latitude of 25 degrees 40 minutes; by which they discovered that the current set to the north. They were at this time over-against

an opening; the coast lying to the north-east, they continued a north course, but found the coast one continued rock of a red colour, all of an height, against which the waves broke with such force, that it was impossible for them to land.

The wind blew very fresh in the morning on the 14th; but towards noon it fell calm; they were then in the height of 24 degrees, with a small gale at east, but the tide still carried them further north than they desired, because their design was to make a descent as soon as possible; and with this view they sailed slowly along the coast, till perceiving a great deal of smoke at a distance, they rowed towards it as fast as they were able, in hopes of finding men, and water of course. When they came near the shore, they found it so steep, so full of rocks, and the sea beating over them with such fury, that it was impossible to land; six of the men, however, trusting to their skill in swimming, threw themselves into the sea and resolved to get on shore at any rate; which with great difficulty and danger they at last effected, the boat remaining at anchor in 25 fathoms water. The men on shore spent the whole day in looking for water; and while they were thus employed, they saw four men, who came up very near; but one of the Dutch sailors advancing towards them, they immediately ran away as fast as they were able, so that they were distinctly seen by those in the boat. These people were black savages, quite naked, not having so much as any covering about their middle. The sailors finding no hopes of water on all the coast, swam on board again, much hurt and wounded, by their being beat by the waves upon the rocks; and as soon as they were on board, they weighed anchor, and continued their course along the shore, in hopes of finding some better landing-place.

On the 25th, in the morning, they discovered a cape, from the point of which there ran a ridge of rocks a mile into the sea, and behind it another ridge of rocks; they ventured between them as the sea was pretty calm; but finding there was no passage, they soon returned. About noon, they saw another opening; and the sea being still very smooth, they entered it, though the passage was very dangerous, inasmuch as they had but two feet water, and the bottom full of stones; the coast appearing a flat sand for about a mile. As soon as they got on shore, they fell to digging in the sand, but the water that came into their wells was so brackish, that they could not drink it, though they were on the very point of choaking for thirst. At last, in the hollows of the rocks, they met with considerable quantities of rain water, which was a great relief to them, since they had been for some days at no better allowance than a pint a-piece; they soon furnished themselves in the night with about eighty gallons, perceiving, in the place where they landed, that the savages had been there lately, by a large heap of ashes, and the remains of some cray-fish.

On the 16th, in the morning, they returned on shore, in hopes of getting more water, but were disappointed; and having now time to observe the country, it gave them no great hopes of better success, even if they had travelled farther within land, which appeared a thirsty barren plain, covered with ant-hills, so high that they looked afar off like the huts of negroes, and at the same time they were plagued with flies, and those in such multitudes, that they were scarce able to defend themselves. They saw at a distance eight savages, with each a staff in his hand, who advanced towards them within musket shot; but as soon as they perceived the Dutch sailors moving towards them, they fled as fast as they were able. It was by this time about noon, and, perceiving no appearance either of getting water, or entering into any correspondence with the natives, they resolved to go on board, and continue their course towards the north, in hopes, as they were already in the latitude of 22 degrees 17 minutes, they

might

might be able to find the river of Jacob Remmescens; but the wind veering about to the north-east, they were not able to continue longer upon that coast, and therefore reflecting that they were now above one hundred miles from the place where they were shipwrecked, and had scarce as much water as would serve them in their passage back, they came to a settled resolution of making the best of their way to Batavia, in order to acquaint the governor-general with their misfortunes, and to obtain such assistance as was necessary to get their people off the coast.

On the 17th they continued their course to the north-east, with a good wind and fair weather; the 18th and 19th it blew hard, and they had much rain; on the 20th they found themselves in 19 degrees 22 minutes; on the 22d they had another observation, and found themselves in the height of 16 degrees 10 minutes, which surprised them very much, and was a plain proof that the current carried them northwards at a great rate; on the 27th it rained very hard, so that they were not able to take an observation, but, towards noon, they saw, to their great satisfaction, the coasts of Java, in the latitude of eight degrees, at the distance of about four or five miles. They altered their course to west-north-west, and, towards evening, entered the gulf of an island very full of trees, where they anchored in eight fathoms water, and there passed the night; on the 28th, in the morning, they weighed, and rowed with all their force, in order to make the land, that they might search for water. being now again at the point of perishing for thirst. Very happily for them, they were no sooner on shore than they discovered a fine rivulet at a small distance, where, having comfortably quenched their thirst, and filled all their casks with water, they about noon continued their course for Batavia.

On the 29th, about midnight, in the second watch, they discovered an island, which they left on their starboard; about noon they found themselves in the height of 6 degrees 48 minutes; about three in the afternoon they passed between two islands, the westernmost of which appeared full of cocoa-trees. In the evening they were about a mile from the south point of Java, and in the second watch, exactly between Java and the Isle of Princes. The 30th, in the morning, they found themselves on the coast of the last-mentioned island, not being able to make above two miles that day. On July 1st, the weather was calm, and about noon they were three leagues from Dwaersindenwegh, that is, Thwart-the-way Island; but towards the evening they had a pretty brisk wind at north-west, which enabled them to gain that coast. On the 2d, in the morning, they were right against the island of Topers-boetien, and were obliged to lay at anchor till eleven o'clock, waiting for the sea-breeze, which, however, blew so faintly, that they were not able to make above two miles that day; about sun-set they perceived a vessel between them and Thwart-the-way Island, upon which they resolved to anchor as near the shore as they could that night, and there wait the arrival of the ship. In the morning they went on board her, in hopes of procuring arms for their defence, in case the inhabitants of Java were at war with the Dutch. They found two other ships in company, on board one of which was Mr. Ramburg, counsellor of the Indies. Captain Pelsart went immediately on board his ship, where he acquainted him with the nature of his misfortune, and went with him afterwards to Batavia.

We will now leave the Captain soliciting succours from the Governor-general, in order to return to the crew who were left upon the islands; among whom there happened such transactions, as, in their condition, the reader would little expect, and perhaps will hardly credit. In order to their being thoroughly understood, it is necessary to observe, that they had for supercargo one Jerom Cornelis, who had been formerly an



an apothecary at Harlem. This man, when they were on the coast of Africa, had plotted with the pilot and some others to run away with the vessel, and either to carry her into Dunkirk, or to turn pirates in her on their own account. This supercargo had remained ten days on board the wreck, not being able in all that time to get on shore. Two whole days he spent on the mainmast, floating to and fro, till at last, by the help of one of the yards, he got to land. When he was once on shore, the command, in the absence of Captain Pelsart, devolved of course upon him, which immediately revived in his mind his old design, inasmuch that he resolved to lay hold of this opportunity to make himself master of all that could be saved out of the wreck, conceiving that it would be easy to surprize the captain on his return, and determining to go on the account, that is to say, to turn pirate in the captain's vessel. In order to carry this design into execution, he thought necessary to rid themselves of such of the crew as were not like to come into their scheme; but before he proceeded to dip his hands in blood, he obliged all the conspirators to sign an instrument by which they engaged to stand by each other.

The whole ship's company were on shore in three islands, the greatest part of them in that where Cornelis was, which island they thought fit to call the burying-place of Batavia. One Mr. Weybhays was sent with another body into an adjacent island to look for water, which, after twenty days search, he found, and made the appointed signal, by lighting three fires, which, however, were not seen, nor taken notice of by those under the command of Cornelis, because they were busy in butchering their companions, of whom they had murdered between thirty and forty; but some few, however, got off upon a raft of planks tied together, and went to the island, where Mr. Weybhays was, in order to acquaint him with the dreadful accident that had happened. Mr. Weybhays, having with him forty-five men, they all resolved to stand upon their guard, and to defend themselves to the last man, in case these villains should attack them. This indeed was their design, for they were apprehensive both of this body, and of those who were on the third island, giving notice to the captain on his return, and thereby preventing their intention of running away with his vessel. But as this third company was by much the weakest, they began with them first, and cut them all off, except five women and seven children, not in the least doubting that they should be able to do as much by Weybhays and his company; in the mean time, having broke open the merchant's chests, which had been saved out of the wreck, they converted them to their own use, without ceremony.

The traitor, Jerom Cornelis, was so much elevated with the success that had hitherto attended his villainy, that he immediately began to fancy all difficulties were over, and gave a loose to his vicious inclinations in every respect: he ordered clothes to be made of rich stuffs that had been saved, for himself and his troop, and having chosen out of them a company of guards, he ordered them to have scarlet coats, with a double lace of gold or silver. There were two minister's daughters among the women, one of whom he took for his own mistress, gave the second to a favourite of his, and ordered that the other three women should be common to the whole troop: he afterwards drew up a set of regulations, which were to be the laws of his new principality, taking to himself the style and title of Captain-general, and obliging his party to sign an act or instrument, by which they acknowledged him as such. These points once settled, he resolved to carry on the war. He first of all embarked on board two shallops twenty-two men, well armed, with orders to destroy Mr. Weybhays and his company; and on their miscarrying, he undertook a like expedition with thirty-seven

men, in which, however, he had no better success; for Mr. Weybhays, with his people, though armed only with staves, with nails drove into their heads, advanced even into the water to meet them, and, after a brisk engagement, compelled these murderers to retire.

Cornelis then thought fit to enter into a negotiation, which was managed by the chaplain, who remained with Mr. Weybhays; and after several comings and goings from one party to the other, a treaty was concluded upon the following terms; viz. That Mr. Weybhays and his company should for the future remain undisturbed, provided they delivered up a little boat, in which one of the sailors had made his escape from the island in which Cornelis was with his gang, in order to take shelter on that where Weybhays was with his company. It was also agreed, that the latter should have a part of the stuffs and silks given them for clothes, of which they stood in great want. But, while this affair was in agitation, Cornelis took the opportunity of the correspondence between them being restored, to write letters to some French soldiers that were in Weybhays's company, promising them six thousand livres a-piece, if they would comply with his demands; not doubting but by this artifice he should be able to accomplish his end.

His letters however had no effect; on the contrary, the soldiers to whom they were directed, carried them immediately to Mr. Weybhays. Cornelis not knowing that this piece of treachery was discovered, went over the next morning, with three or four of his people, to carry to Mr. Weybhays the clothes that had been promised him. As soon as they landed, Weybhays attacked them, killed two or three, and made Cornelis himself prisoner. One Wouterlofs, who was the only man that made his escape, went immediately back to the conspirators, put himself at their head, and came the next day to attack Weybhays, but met with the same fate as before; that is to say, he and the villains that were with him were soundly beat.

Things were in this situation when Captain Pellsart arrived in the *Sardam* frigate. He sailed up to the wreck, and saw with great joy a cloud of smoke ascending from one of the islands, by which he knew that all his people were not dead. He came immediately to an anchor; and having ordered some wine and provisions to be put into the skiff, resolved to go in person with these refreshments to one of these islands. He had hardly quitted the ship before he was boarded by a boat from the island to which he was going; there were four men in the boat, of whom Weybhays was one, who immediately ran to the Captain, told him what had happened, and begged him to return to his ship immediately, for that the conspirators intended to surprize her; that they had already murdered 125 persons, and that they had attacked him and his company that very morning, with two shallops.

While they were talking the two shallops appeared; upon which the captain rowed to his ship as fast as he could, and was hardly got on board before they arrived at the ship's side. The captain was surprized to see men in red coats, laced with gold and silver, with arms in their hands. He demanded what they meant by coming on board armed. They told him he should know when they were on board the ship. The captain replied that they should come on board, but that they must first throw their arms into the sea, which if they did not do immediately, he would sink them as they lay. As they saw that disputes were to no purpose, and that they were entirely in the captain's power, they were obliged to obey. They accordingly threw their arms overboard, and were then taken into the vessel, where they were instantly put in irons. One of them whose name was John Bremen, and who was first examined, owned that he had

murdered

murdered with his own hands, or had assisted in murdering, no less than twenty-seven persons. The same evening Weybhays brought his prisoner Cornelis on board, where he was put in irons, and strictly guarded.

On the 18th of September, Captain Pelsart, with the master, went to take the rest of the conspirators in Cornelis's island. They went in two boats. The villains, as soon as they saw them land, lost all their courage and fled from them. They surrendered without a blow, and were put in irons with the rest. The captain's first care was to recover the jewels which Cornelis had dispersed among his accomplices: they were, however, all of them soon found, except a gold chain and a diamond ring; the latter was also found at last, but the former could not be recovered. They went next to examine the wreck, which they found staved into an hundred pieces; the keel lay on a bank of sand on one side, the fore part of the vessel stuck fast on a rock, and the rest of her lay here and there as the pieces had been driven by the waves, so that Captain Pelsart had very little hopes of saving any of the merchandize. One of the people belonging to Weybhays's company told him, that one fair day, which was the only one they had in a month, as he was fishing near the wreck, he had struck the pole in his hand against one of the chests of silver, which revived the captain a little, as it gave him reason to expect that something might still be saved. They spent all the 19th in examining the rest of the prisoners, and in confronting them with those who escaped from the massacre.

On the 20th they sent several kinds of refreshments to Weybhays's company, and carried a good quantity of water from the isle. There was something very singular in finding this water; the people who were on shore there had subsisted near three weeks on rain-water, and what lodged in the clefts of the rocks, without thinking that the water of two wells which were on the island could be of any use, because they saw them constantly rise and fall with the tide, from whence they fancied they had a communication with the sea, and consequently that the water must be brackish; but upon trial they found it to be very good; and so did the ship's company, who filled their casks with it.

On the 21st the tide was so low, and an east-south-east wind blew so hard, that during the whole day the boat could not get out. On the 22d they attempted to fish upon the wreck, but the weather was so bad, that even those who could swim very well durst not approach it. On the 25th the master and the pilot, the weather being fair, went off again to the wreck, and those who were left on shore, observing that they wanted hands to get any thing out of her, sent off some to assist them. The captain went also himself to encourage the men, who soon weighed one chest of silver, and some time after another. As soon as these were safe ashore they returned to their work, but the weather grew so bad that they were quickly obliged to desist, though some of their divers from Guzarat assured them they had found six more, which might easily be weighed. On the 26th, in the afternoon, the weather being fair, and the tide low, the master returned to the place where the chests lay, and weighed three of them, leaving an anchor with a gun tied to it, and a buoy to mark the place where the fourth lay, which, notwithstanding their utmost efforts, they were not able to recover.

On the 27th the south wind blew very cold. On the 28th the same wind blew stronger than the day before; and as there was no possibility of fishing in the wreck for the present, Captain Pelsart held a council to consider what they should do with the prisoners; that is to say, whether it would be best to try them there upon the spot, or to carry them to Batavia, in order to their being tried by the Company's officers. After

mature deliberation, reflecting on the number of prisoners, and the temptation that might arise from the vast quantity of silver on board the frigate, they at last came to a resolution to try and execute them there, which was accordingly done; and they embarked immediately afterwards for Batavia.

## REMARKS.

This voyage was translated from the original Dutch by Thevenot, and printed by him in the first volume of his collections. Pelsart's route is traced in the map of the globe published by Delisle in the year 1700.

As this voyage is of itself very short, I shall not detain the reader with many remarks; but shall confine myself to a very few observations, in order to show the consequences of the discovery made by Captain Pelsart. The country upon which he suffered shipwreck was New Holland, the coast of which had not till then been at all examined; and it was doubtful how far it extended. There had indeed been some reports spread with relation to the inhabitants of this country, which Captain Pelsart's relation shows to have been false; for it had been reported, that when the Dutch East India Company sent some ships to make discoveries, their landing was opposed by a race of gigantic people, with whom the Dutch could by no means contend. But our author says nothing of the extraordinary size of the savages that were seen by Captain Pelsart's people; from whence it is reasonable to conclude, that this story was circulated with no other view than to prevent other nations from venturing into these seas. It is also remarkable, that this is the very coast surveyed by Captain Dampier, whose account agrees exactly with that contained in this voyage. Now, though it be true, that from all these accounts there is nothing said which is much to the advantage either of the country or its inhabitants, yet we are to consider that it is impossible to represent either in a worse light than that in which the Cape of Good Hope was placed, before the Dutch took possession of it; and plainly demonstrated that industry could make a paradise of what was a perfect purgatory while in the hands of the Hottentots. If, therefore, the climate of this country be good, and the soil fruitful, both of which were affirmed in this relation, there could not be a more proper place for a colony than some part of New Holland, or of the adjacent country of Carpentaria. I shall give my reasons for asserting this when I come to make my remarks on a succeeding voyage. At present I shall confine myself to the reasons that have induced the Dutch East India Company to leave all these countries unsettled, after having first shewn so strong an inclination to discover them, which will oblige me to lay before the reader some secrets in commerce that have hitherto escaped common observation, and which, whenever they are as thoroughly considered as they deserve, will undoubtedly lead us to as great discoveries as those of Columbus or Magellan.

In order to make myself perfectly understood, I must observe, that it was the finding out of the Moluccas, or Spice-islands, by the Portuguese, that raised that spirit of discovery, which produced Columbus's voyage, which ended in finding America; though in fact, Columbus intended rather to reach this country of New Holland. The assertion is bold, and at first sight may appear improbable; but a little attention will make it so plain, that the reader must be convinced of the truth of what I say. The proposition made by Columbus to the State of Genoa, the Kings of Portugal, Spain, England and France, was this, that he could discover a new route to the East Indies; that is to say, without going round the Cape of Good Hope. He grounded  
this

this proposition on the spherical figure of the earth, from whence he thought it self evident, that any given point might be sailed to through the great ocean, either by steering east or west. In his attempt to go to the East Indies by a west course, he met with the islands and continent of America; and finding gold and other commodities, which till then had never been brought from the Indies, he really thought that this was the west coast of that country to which the Portuguese sailed by the Cape of Good Hope; and hence came the name of the West Indies. Magellan, who followed his steps, and was the only discoverer who reasoned systematically, and knew what he was doing, proposed to the Emperor Charles V. to complete what Columbus had begun, and to find a passage to the Moluccas by the west; which, to his immortal honour, he accomplished.

When the Dutch made their first voyages to the East Indies, which was not many years before Captain Pelsart's shipwreck on the coast of New Holland; for their first fleet arrived in the East Indies in 1596, and Pelsart lost his ship in 1629; I say, when the Dutch first undertook the East India trade, they had the Spice-islands in view; and as they are a nation justly famous for the steady pursuit of whatever they take in hand, it is notorious, that they never lost sight of their design, till they had accomplished it, and made themselves entirely masters of these islands, of which they still continue in possession. When this was done, and they had effectually driven out the English, who were likewise settled in them, they fixed the seat of their government in the island of Amboyna, which lay very convenient for the discovery of the southern countries; which, therefore, they prosecuted with great diligence, from the year 1619 to the time of Captain Pelsart's shipwreck; that is, for the space of twenty years.

But after they removed the seat of their government from Amboyna to Batavia, they turned their views another way, and never made any voyage expressly for discoveries on that side, except the single one of Captain Tafinan; of which we are to speak in article X. It was from this period of time, that they began to take new measures, and having made their excellent settlement at the Cape of Good Hope, resolved to govern their trade to the East Indies by these two capital maxims: 1. To extend their trade all over the Indies; and to fix themselves so effectually in the richest countries, as to keep all, or at least the best and most profitable part of their commerce to themselves. 2. To make the Moluccas, and the islands dependent on them, their frontier; and to omit nothing that should appear necessary to prevent strangers, or even Dutch ships not belonging to the Company, from ever navigating those seas, and consequently from ever being acquainted with the countries that lie in them. How well they have prosecuted the first maxim, has been very largely shewn in a foregoing article, wherein we have an ample description of the mighty empire in the hands of their East India Company. As for the second maxim, the reader, in the perusal of Funnel's, Dampier's, and other voyages, but especially the first, must be satisfied, that it is what they have constantly at heart, and which, at all events, they are determined to pursue, at least with regard to strangers; and as to their own countrymen, the usage they gave to James le Maire, and his people, is a proof that cannot be contested.

Those things being considered, it is very plain that the Dutch, or rather the Dutch East India Company, are fully persuaded that they have already as much or more territory in the East Indies than they can well manage, and therefore they neither do nor ever will think of settling New Guinea, Carpentaria, New Holland, or any of the adjacent

adjacent islands, till either their trade declines in the East Indies, or they are obliged to exert themselves on this side to prevent other nations from reaping the benefits that might accrue to them by their planting those countries. But this is not all ; for as the Dutch have no thoughts of settling these countries themselves, they have taken all imaginable pains to prevent any relations from being published which might invite or encourage any other nation to make attempts this way ; and I am thoroughly persuaded that this very account of Captain Pelsart's shipwreck would never have come into the world, if it had not been thought it would contribute to this end, or, in other words, would serve to frighten other nations from approaching such an inhospitable coast, every where beset with rocks absolutely void of water, and inhabited by a race of savages more barbarous, and, at the same time, more miserable than any other creatures in the world.

. The author of this voyage remarks, for the use of seamen, that in the little island occupied by Weybhays, after digging two pits, they were for a considerable time afraid to use the water, having found that these pits ebbed and flowed with the sea : but necessity at last constraining them to drink it, they found it did them no hurt. The reason of the ebbing and flowing of these pits was their nearness to the sea, the water of which percolated through the sand, lost its saltiness, and so became potable, though it followed the motions of the ocean whence it came.

# THE VOYAGE OF CAPTAIN ABEL JANSEN TASMAN

FOR THE DISCOVERY OF SOUTHERN COUNTRIES,

*By Direction of the Dutch East India Company.*

[Taken from his original Journal.] \*

1. *The Occasion and Design of this Voyage.* — 2. *Captain Tasman sails from Batavia, August 14, 1642.* — 3. *Remarks on the Variation of the Needle.* — 4. *He discovers a new Country, to which he gives the Name of Van Diemen's Land.* — 5. *Sails from thence for New Zealand.* — 6. *Visits the Island of the Three Kings; and goes in Search of other Islands discovered by Schouten.* — 7. *Remarkable Occurrences in the Voyage.* — 8. *Observations on, and Explanation of, the Variation of the Compass.* — 9. *Discovers a new Island, which he calls Pylslaart Island.* — 10. *And two Islands, to which he gives the Name of Amsterdam and Rotterdam.* — 11. *And an Archipelago of twenty small Islands.* — 12. *Occurrences in the Voyage.* — 13. *He arrives at the Archipelago of Anthonj Java.* — 14. *His Arrival on the Coast of New Guinea.* — 15. *Continues his Voyage along that Coast.* — 16. *Arrives in the Neighbourhood of Burning Island, and surveys the whole Coast of New Guinea.* — 17. *Comes to the Islands of Jama and Moa.* — 18. *Prosecutes his Voyage to Ceram.* — 19. *Arrives safely at Batavia, June 15, 1643.* — 20. *Consequences of Captain Tasman's Discoveries.* — 21. *Remarks upon the Voyage.*

1. **T**HE great discoveries that were made by the Dutch in these southern countries, were subsequent to the famous voyage of Jaques le Maire, who in 1616, passed the straits called by his name, in 1618, that part of Terra Australis was discovered which the Dutch call Concordia. The next year, the Land of Edels was found, and received its name from its discoverer. In 1620, Batavia was built on the ruins of the old city of Jacatra; but the seat of government was not immediately removed from Amboyna. In 1622, that part of New Holland which is called Lewin's Land, was first found; and in 1627, Peter Nuyts discovered, between New Holland and New Guinea, a country, which bears his name. There were also some other voyages made, of which, however, we have no sort of account, except that the Dutch were continually beaten in all their attempts to land upon this coast. On their settlement, however, at Batavia, the then general and council of the Indies thought it requisite to have a more perfect survey made of the new-found countries, that the memory of them at least might be preserved, in case no further attempts were made to settle them; and it was very probably a foresight of few ships going that route any more, which induced such as had then the direction of the Company's affairs to wish, that some such survey and description might be made by an able seaman, who was well acquainted with those

\* From Harris, i. 325.



coasts, and who might be able to add to the discoveries already made, as well as furnish a more accurate description, even of them, than had been hitherto given.

This was faithfully performed by Captain Tafman; and, from the lights afforded by his journal, a very exact and curious map was made of all these new countries. But his voyage was never published entire; and it is very probable that the East-India Company never intended it should be published at all. However, Dirk Rembrantz, moved by the excellency and accuracy of the work, published in Low Dutch an extract of Captain Tafman's Journal, which has been ever since considered as a very great curiosity; and, as such, has been translated into many languages, particularly into our own, by the care of the learned Professor of Gresham College, Doctor Hook, an abridgement of which translation found a place in Doctor Harris's Collection of Voyages. But we have made no use of either of these pieces, the following being a new translation, made with all the care and diligence that is possible.

2. On August 14, 1642, I sailed from Batavia with two vessels; the one called the *Heemskirk*, and the other the *Zee-Haan*. On September 5, I anchored at Maurice Island, in the latitude of  $20^{\circ}$  south, and in the longitude of  $83^{\circ} 48'$ . I found this island fifty German miles more to the east than I expected; that is to say,  $3^{\circ} 33'$  of longitude. This island was so called from Prince Maurice, being before known by the name of Cerne. It is about fifteen leagues in circumference, and has a very fine harbour, at the entrance of which there is one hundred fathoms water. The country is mountainous; but the mountains are covered with green trees. The tops of these mountains are so high, that they are lost in the clouds, and are frequently covered by thick exhalations or smoke, that ascends from them. The air of this island is extremely wholesome. It is well furnished with flesh and fowl; and the sea on its coasts abounds with all sorts of fish. The finest ebony in the world grows here. It is a tall, straight tree, of a moderate thickness, covered with a green bark, very thick, under which the wood is as black as pitch, and as close as ivory. There are other trees on the island, which are of a bright red, and a third sort as yellow as wax. The ships belonging to the East India Company commonly touch at this island for refreshments, in their passage to Batavia.

I left this island on the 8th of October, and continued my course to the south, to the latitude of  $40^{\circ}$  or  $41^{\circ}$ , having a strong north-west wind; and finding the needle vary  $23$ ,  $24$ , and  $25^{\circ}$  to the 22d of October, I sailed from that time to the 29th to the east, inclining a little to the south, till I arrived in the latitude of  $45^{\circ} 47'$  south, and in the longitude of  $89^{\circ} 44'$ ; and then observed the variation of the needle to be  $26^{\circ} 45'$  towards the west.

As our author was extremely careful in this particular, and observed the variation of the needle with the utmost diligence, it may not be amiss to take this opportunity of explaining this point, so that the importance of his remarks may sufficiently appear. The needle points exactly north only in a few places, and perhaps not constantly in them; but in most it declines a little to the east, or to the west, whence arises eastern and western declination: when this was first observed, it was attributed to certain excavations or hollows in the earth, to veins of lead, stone, and other such-like causes. But when it was found, by repeated experiments, that this variation varied, it appeared plainly that none of those causes could take place; since, if they had, the variation in the same place must always have been the same, whereas the fact is otherwise.

Here at London, for instance, in the year 1580, the variation was observed to be  $11^{\circ} 17'$  to the east; in the year 1666, the variation was here  $34'$  to the west; and in the year 1734, the variation was somewhat more than  $1^{\circ}$  west. In order to find the variation

variation of the needle with the least error possible, the seamen take this method : they observe the point the sun is in, by the compass, any time after its rising, and then take the altitude of the sun ; and, in the afternoon, they observe when the sun comes to the same altitude, and observe the point the sun is then in by the compass ; for the middle, between these two, is the true north or south point of the compass ; and the difference between that and the north or south upon the card, which is pointed out by the needle, is the variation of the compass, and shews how much the north and south, given by the compass, deviates from the true north and south points of the horizon. It appears clearly from what has been said, that, in order to arrive at the certain knowledge of the variation, and of the variation of that variation of the compass, it is absolutely requisite to have, from time to time, distinct accounts of the variation, as it is observed in different places : whence the importance of Captain Tasman's remarks, in this respect, sufficiently appears. It is true, that the learned and ingenious Doctor Halley has given a very probable account of this matter ; but as the probability of that account arises only from its agreement with observations, it follows, those are as necessary and as important as ever, in order to strengthen and confirm it.

3. On the 6th of November, I was in  $49^{\circ} 4'$  south latitude, and in the longitude of  $114^{\circ} 56'$  ; the variation was at this time  $26^{\circ}$  westward ; and, as the weather was foggy, with hard gales, and a rolling sea from the south-west and from the south, I concluded from thence, that it was not at all probable there should be any land between those two points. On November 15, I was in the latitude of  $44^{\circ} 33'$  south, and in the longitude of  $140^{\circ} 32'$ . The variation was then  $18^{\circ} 30'$  west, which variation decreased every day, in such a manner, that, on the 21st of the same month, being in the longitude of  $158^{\circ}$ , I observed the variation to be no more than  $4^{\circ}$ . On the 22d of that month, the needle was in continual agitation, without resting in any of the eight points ; which led me to conjecture, that we were near some mine of loadstone.

This may, at first sight, seem to contradict what has been before laid down, as to the variation, and the causes of it : but, when strictly considered, they will be found to agree very well ; for when it is asserted, that veins of loadstone have nothing to do with the variation of the compass, it is to be understood of the constant variation of a few degrees to the east, or to the west : but in cases of this nature, where the variation is absolutely irregular, and the needle plays quite round the compass, our author's conjecture may very well find place : yet it must be owned, that it is a point far enough from being clear, that mines of loadstone affect the compass at a distance ; which, however, might be very easily determined, since there are large mines of loadstone in the island of Elba, on the coast of Tuscany.

4. On the 24th of the same month, being in the latitude of  $42^{\circ} 25'$  south, and in the longitude of  $163^{\circ} 50'$ , I discovered land, which lay east-south-east, at the distance of ten miles, which I called Van Diemen's Land. The compass pointed right towards this land. The weather being bad, I steered south and by east along the coast, to the height of  $44^{\circ}$  south, where the land runs away east, and afterwards north-east and by north. In the latitude of  $43^{\circ} 10'$  south, and in the longitude of  $167^{\circ} 55'$ , I anchored on the 1st of December, in a bay, which I called the Bay of Frederic Henry. I heard, or at least fancied I heard, the sound of people upon the shore ; but I saw nobody. All I met with worth observing was two trees, which were two fathoms or two fathoms and an half in girth, and sixty or sixty-five feet high from the root to the branches : they had cut with a flint a kind of steps in the bark, in order to climb up to the birds-nests : these steps were the distance of five feet from each other ; so that we must conclude, that either these people are of a prodigious size, or that they have some way of climbing

trees that we are not used to : in one of the trees the steps were so fresh, that we judged they could not have been cut above four days.

The noise we heard resembled the noise of some sort of trumpet ; it seemed to be at no great distance, but we saw no living creature notwithstanding. I perceived also in the sand, the marks of wild beasts' feet, resembling those of a tiger, or some such creature ; I gathered also some gum from the trees, and likewise some lack. The tide ebbs and flows there about three feet. The trees in this country do not grow very close, nor are they encumbered with bushes or underwood. I observed smoke in several places ; however, we did nothing more than set up a post, on which every one cut his name, or his mark, and upon which I hoisted a flag. I observed that, in this place, the variation was changed to  $3^{\circ}$  eastward. On December 5th, being then, by observation, in the latitude of  $41^{\circ} 34'$ , and in the longitude  $169^{\circ}$ , I quitted Van Diemen's Land, and resolved to steer east to the longitude of  $195^{\circ}$ , in hopes of discovering the islands of Solomon.

5. On September 9th, I was in the latitude of  $42^{\circ} 37'$  south, and in the longitude of  $176^{\circ} 29'$ ; the variation being there  $5^{\circ}$  to the east. On the 12th of the same month, finding a great rolling sea coming in on the south-west, I judged there was no land to be hoped for on that point. On the 13th, being in the latitude of  $42^{\circ} 10'$  south, and in the longitude of  $188^{\circ} 28'$ , I found the variation  $7^{\circ} 30'$  eastward. In this situation I discovered an high mountainous country, which is at present marked in the charts, under the name of New Zealand. I coasted along the shore of this country to the north-north-east, till the 18th ; and being then in the latitude of  $40^{\circ} 50'$  south, and in the longitude of  $191^{\circ} 41'$ , I anchored in a fine bay, where I observed the variation to be  $9^{\circ}$  towards the east.

We found here abundance of the inhabitants : they had very hoarse voices, and were very large-made people. They durst not approach the ship nearer than a stone's throw ; and we often observed them playing on a kind of trumpet, to which we answered with the instruments that were on board our vessel. These people were of a colour between brown and yellow, their hair long, and almost as thick as that of the Japanese, combed up, and fixed on the top of their heads with a quill, or some such thing, that was thickest in the middle, in the very same manner that Japanese fastened their hair behind their heads. These people cover the middle of their bodies, some with a kind of mat, others with a sort of woollen cloth ; but, as for their upper and lower parts, they leave them altogether naked.

On the 19th of December, these savages began to grow a little bolder, and more familiar, inasmuch that at last they ventured on board the Heemskirk, in order to trade with those in the vessel : as soon as I perceived it, being apprehensive that they might attempt to surprise that ship, I sent my shallop, with seven men, to put the people in the Heemskirk upon their guard, and to direct them not to place any confidence in those people. My seven men, being without arms, were attacked by these savages, who killed three of the seven, and forced the other four to swim for their lives ; which occasioned my giving that place the name of the Bay of Murderers. Our ship's company would, undoubtedly, have taken a severe revenge, if the rough weather had not hindered them. From this bay we bore away east, having the land in a manner all round us. This country appeared to us rich, fertile, and very well situated ; but as the weather was very foul, and we had at this time a very strong west wind, we found it very difficult to get clear of the land.

6. On the 24th of December, as the wind would not permit us to continue our way to the north, as we knew not whether we should be able to find a passage on that side,

fide, and as the flood came in from the south-east, we concluded that it would be the best to return into the bay, and seek some other way out; but, on the 26th, the wind becoming more favourable, we continued our route to the north, turning a little to the west. On the 4th of January 1643, being then in the latitude of  $34^{\circ} 35'$  south, and in the longitude of  $191^{\circ} 9'$ , we failed quite to the cape, which lies north-west, where we found the sea rolling in from the north-east; whence we concluded, that we had at last found a passage, which gave us no small joy. There was in this streight an island, which we called the island of the Three Kings; the cape of which we doubled, with a design to have refreshed ourselves; but, as we approached it, we perceived on the mountain thirty or five and thirty persons, who, as far as we could discern at such a distance, were men of very large size, and had each of them a large club in his hand: they called out to us in a rough strong voice, but we could not understand any thing of what they said. We observed that these people walked at a very great rate, and that they took prodigious large strides. We made the tour of the island; in doing which, we saw but very few inhabitants; nor did any of the country seem to be cultivated; we found indeed a fresh-water river, and then we resolved to sail east, as far as  $220^{\circ}$  of longitude; and from thence north, as far as the latitude of  $17^{\circ}$  south; and thence to the west, till we arrived at the isles of Cocos and Horne, which were discovered by William Schovten, where we intended to refresh ourselves, in case we found no opportunity of doing it before; for though we had actually landed on Van Diemen's Land, we met with nothing there; and, as for New Zealand, we never set foot on it.

In order to render this passage perfectly intelligible, it is necessary to observe, that the island of Cocos lies in the latitude of  $15^{\circ} 10'$  south; and, according to Schovten's account, is well inhabited, and well cultivated, abounding with all sorts of refreshments; but, at the same time, he describes the people as treacherous and base to the last degree. As for the islands of Horne, they lie nearly in the latitude of  $15^{\circ}$ , are extremely fruitful, and inhabited by people of a kind and gentle disposition, who readily bestowed on the Hollanders whatever refreshments they could ask. It was no wonder therefore, that, finding themselves thus distressed, Captain Tasman thought of repairing to these islands, where he was sure of obtaining refreshments, either by fair means or otherwise; which design, however, he did not think fit to put in execution.

7. On the 8th of January, being in the latitude of  $30^{\circ} 25'$  south, and in the longitude of  $192^{\circ} 20'$ , we observed the variation of the needle to be  $9^{\circ}$  towards the east; and, as we had an high rolling sea from the south-west, I conjectured there could not be any land hoped for on that side. On the 12th, we found ourselves in  $30^{\circ} 5'$  south latitude, and in  $195^{\circ} 27'$  of longitude, where we found the variation  $9^{\circ} 30'$  to the east, a rolling sea from the south-east and from the south-west. It is very plain, from these observations, that the position laid down by Dr. Halley, that the motion of the needle is not governed by the poles of the world, but by other poles which move round them, is highly probable; for otherwise it is not easy to understand, how the needle came to have, as our author affirms it had, a variation of near  $27^{\circ}$  to the west, in the latitude of  $45^{\circ} 47'$ , and then gradually decreasing till it had no variation at all; after which it turned east, in the latitude of  $42^{\circ} 37'$ , and so continued increasing its variation eastwardly to this time.

8. On the 16th, we were in the latitude of  $26^{\circ} 29'$  south, and in the longitude of  $199^{\circ} 32'$ , the variation of the needle being  $8^{\circ}$ . Here we are to observe, that the eastern variation decreases; which is likewise very agreeable to Doctor Halley's hypothesis; which, in few words, is this: that a certain large solid body contained

within, and every way separated from the earth, (as having its own proper motion) and being included like a kernel in its shell, revolves circularly from east to west, as the exterior earth revolves the contrary way in the diurnal motion; whence it is easy to explain the position of the four magnetical poles which he attributes to the earth, by allowing two to the nucleus, and two to the exterior earth. And, as the two former perpetually alter the situation by their circular motion, their virtue, compared with the exterior poles, must be different at different times; and consequently, the variation of the needle will perpetually change. The doctor attributes to the nucleus an European north pole and an American south one, on account of the variation of variations observed near these places, as being much greater than those found near the two other poles. And he conjectures, that these poles will finish their revolution in about seven hundred years; and after that time, the same situation of the poles obtain again, as at present; and, consequently, the variations will be the same again over all the globe; so that it requires several ages before this theory can be thoroughly adjusted. He assigns this probable cause of the circular revolution of the nucleus: that the diurnal motion, being impressed from without, was not so exactly communicated to the internal parts, as to give them the same precise velocity of rotation as the external; whence the nucleus, being left behind by the exterior earth, seems to move slowly in a contrary direction, as from east to west, with regard to the external earth, considered as at rest in respect of the other. But to return to our voyage:

9. On the 19th of January, being in the latitude of  $22^{\circ} 35'$  south, and in the longitude of  $204^{\circ} 15'$ , we had  $7^{\circ} 30'$  east variation. In this situation we discovered an island about two or three miles in circumference, which was as far as we could discern, very high, steep, and barren. We were very desirous of coming nearer it, but were hindered by south-east and south-south-east winds: we called it the Isle of Pylstaart, because of the great number of that sort of birds we saw flying about it; and the next day we saw two other islands.

10. On the 21st, being in the latitude of  $21^{\circ} 20'$  south, and in the longitude of  $205^{\circ} 29'$ , we found our variation  $7^{\circ}$  to the north-east. We drew near to the coast of the most northern island, which, though not very high, yet was the larger of the two: we called one of these islands Amsterdam, and the other Rotterdam. Upon that of Rotterdam, we found great plenty of hogs, fowls, and all sorts of fruits, and other refreshments. These islanders did not seem to have the use of arms, inasmuch as we saw nothing like them in any of their hands: while we were upon the island, the usage they gave us was fair and friendly, except that they would steal a little. The current is not very considerable in this place, where it ebbs north-east, and flows south-west. A south-west moon causes a spring-tide, which rises seven or eight feet at least. The wind blows there continually south-east, or south-south-east, which occasioned the Heemskirk's being carried out of the road, but, however, without any damage. We did not fill any water here, because it was extremely hard to get it to the ship.

On the 25th, we were in the latitude  $20^{\circ} 15'$  south, and in the longitude of  $206^{\circ} 19'$ . The variation here was  $6^{\circ} 20'$  to the east; and, after having had sight of several other islands, we made that of Rotterdam: the islanders here resemble those on the island of Amsterdam. The people were very good natured, parted readily with what they had, did not seem to be acquainted with the use of arms, but were given to thieving like the natives of Amsterdam Island. Here we took in water and other refreshments, with all the conveniency imaginable. We made the whole circuit of the island, which we found well stocked with cocoa-trees, very regularly planted; we likewise saw abundance

dance of gardens, extremely well laid out, plentifully stocked with all kinds of fruit-trees all planted in straight lines, and the whole kept in such excellent order, that nothing could have a better effect upon the eye. After quitting the island of Rotterdam, we had sight of several other islands; which, however, did not engage us to alter the resolution we had taken of sailing north, to the height of  $17^{\circ}$  south latitude, and from thence to shape a west course, without going near either Traitor's Island, or those of Horne, we having then a very brisk wind from the south-east, or east-south-east.

I cannot help remarking upon this part of Captain Tasman's journal, that it is not easy to conceive, unless he was bound up by his instructions, why he did not remain some time either at Rotterdam or at Amsterdam island, but especially at the former; since, perhaps, there is not a place in the world so happily seated, for making new discoveries with ease and safety. He owns, that he traversed the whole island; that he found it a perfect paradise; and that the people gave him not the least cause of being diffident in point of security; so that, if his men had thrown up ever so slight a fortification, a part of them might have remained there in safety, while the rest had attempted the discovery of the Islands of Solomon on the one hand, or the continent of De Quiros on the other; from neither of which they were at any great distance: and, from his neglecting this opportunity, I take it for granted that he was circumscribed, both as to his course, and to the time he was to employ in these discoveries, by his instructions; for otherwise, so able a seaman, and so curious a man, as his journal shews him to have been, would not certainly have neglected so fair an opportunity.

11. On February 6th, being in  $17^{\circ} 19'$  of south latitude, and in the longitude of  $201^{\circ} 35'$ , we found ourselves embarrassed by nineteen or twenty small islands, every one of which was surrounded with sands, shoals, and rocks. These are marked in the charts by the name of Prince William's Islands, or Heemikirk's Shallows. On the 8th, we were in the latitude of  $15^{\circ} 29'$ , and in the longitude of  $199^{\circ} 31'$ . We had abundance of rain, a strong wind from the north-east, or the north-north-east, with dark, cold weather. Fearing, therefore, that we were run farther to the west than we thought ourselves by our reckoning, and dreading that we should fall to the south of New Guinea, or be thrown upon some unknown coast in such blowing misty weather, we resolved to stand away to the north, or to the north-north-west, till we should arrive in the latitude of  $4^{\circ}$ ,  $5^{\circ}$ , or  $6^{\circ}$  south; and then to bear away west for the coast of New Guinea, as the least dangerous way that we could take.

It is very plain from hence, that Captain Tasman had now laid aside all thoughts of discovering farther; and I think it is not difficult to guess at the reason: when he was in this latitude, he was morally certain that he could, without further difficulty, sail round by the coast of New Guinea and so back again to the East Indies. It is therefore extremely probable, that he was directed by his instructions to coast round that great southern continent already discovered, in order to arrive at a certainty, whether it was joined to any other part of the world, or whether, notwithstanding its vast extent, viz. from the equator to  $43^{\circ}$  of south latitude, and from the longitude of  $123^{\circ}$  to near  $190^{\circ}$ , it was, notwithstanding, an island: this, I say, was in all appearance the true design of his voyage, and the reason of it seems to be this; that an exact chart being drawn from his discoveries, the East India Company might have perfect intelligence of the extent and situation of this new-found country, before they executed the plan they were then contriving for preventing its being visited, or farther discovered, by their own or any other nation: and this too accounts for the care taken in laying  
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down the map of this country on the pavement of the new stadthouse at Amsterdam ; for as this country was henceforward to remain as a kind of deposit, or land of reserve, in the hands of the East India Company, they took this method of intimating as much to their countrymen ; so that, while strangers are gaping at this map as a curiosity, every intelligent Dutchman may say to himself, " Behold the wisdom of the East India Company ! by their present empire, they support the authority of this republic abroad ; and by their extensive commerce, enrich its subjects at home ; and, at the same time, shew us here what a reserve they have made for the benefit of posterity, whenever, through the vicissitudes to which all sublunary things are liable, their present sources of power and grandeur shall fail."

I cannot help supporting my opinion, in this respect, by putting the reader in mind of a very curious piece of ancient history, which furnishes us with the like instance in the conduct of another republic. Diodorus Siculus, in the fifth book of his Historical Library, informs us, that in the African Ocean, some days sail west from Libya, there had been discovered an island, the soil of which was exceedingly fertile, and the country no less pleasant, all the land being finely diversified by mountains and plains, the former thick clothed with trees, the latter abounding with fruits and flowers, the whole watered by innumerable rivulets, and affording so pleasant an habitation, that a finer or more delightful country fancy itself could not feign : yet he assures us, the Carthaginians, those great masters of maritime power and commerce, though they had discovered this admirable island, would never suffer it to be planted ; but reserved it as a sanctuary, to which they might fly, whenever the ruin of their own republic left them no other resource. This tallies exactly with the policy of the Dutch East India Company, who, if they should at any time be driven from their possessions in Java, Ceylon, and other places in that neighbourhood, would without doubt retire back into the Moluccas, and avail themselves effectually of this noble discovery, which lies open to them, and has been hitherto close shut up to all the world beside. But to proceed :

12. On February 14th we were in the latitude of  $16^{\circ} 30'$  south, and in the longitude of  $193^{\circ} 35'$ . We had hitherto had much rain, and bad weather ; but this day, the wind sinking, we hailed our consort the *Zee-Haan* ; and found to our great satisfaction that our reckonings agreed. On the 20th, in the latitude of  $13^{\circ} 45'$ , and in the longitude of  $193^{\circ} 35'$ , we had dark, cloudy weather, much rain, thick fogs, and a rolling sea ; on all sides the wind variable. On the 26th, in the latitude of  $9^{\circ} 48'$  south, and in the longitude of  $193^{\circ} 43'$ , we had a north-west wind, having every day, for the space of twenty-one days, rained more or less. On March 2d, in the latitude of  $9^{\circ} 11'$  south, and in the longitude of  $192^{\circ} 46'$ , the variation was  $10^{\circ}$  to the east, the wind and weather still varying. On March 8th, in the latitude of  $7^{\circ} 46'$  south, and in the longitude of  $190^{\circ} 47'$ , the wind was still variable.

13. On the 14th, in the latitude of  $10^{\circ} 12'$  south, and in the longitude of  $186^{\circ} 14'$ , we found the variation  $8^{\circ} 45'$  to the east. We passed some days without being able to take any observation, because the weather was all that time dark and rainy. On March 20th, in the latitude of  $5^{\circ} 15'$  south, and in the longitude of  $181^{\circ} 16'$ , the weather being then fair, we found the variation  $9^{\circ}$  eastward. On the 22d, in the latitude of  $5^{\circ} 2'$  south, and in the longitude of  $178^{\circ} 32'$ , we had fine fair weather, and the benefit of the east trade wind. This day we had sight of land, which lay four miles west. This land proved to be a cluster of twenty islands, which in the maps are called *Anthong Java*. They lie ninety miles, or thereabouts, from the coast of *New Guinea*. It may not be amiss to observe here, that what Captain Tasman calls



the coast of New Guinea, is in reality the coast of New Britain, which Captain Dampier first discovered to be a large island, separated from the coast of New Guinea.

14. On the 25<sup>th</sup>, in the latitude of  $4^{\circ} 35'$  south, and in the longitude of  $175^{\circ} 10'$ , we found the variation  $9^{\circ} 30'$  east. We were then in the height of the islands of Mark, which were discovered by William Schovten and James le Maire. They are fourteen or fifteen in number, inhabited by savages, with black hair, dressed and trimmed in the same manner as those we saw before at the Bay of Murderers in New Zealand. On the 29<sup>th</sup>, we passed the Green Islands; and on the 30<sup>th</sup>, that of St. John; which were likewise discovered by Schovten and Le Maire. This island they found to be of a considerable extent; and judged it to lie at the distance of one thousand eight hundred and forty leagues from the coast of Peru. It appeared to them well inhabited, and well cultivated, abounding with flesh, fowl, fish, fruit, and other refreshments. The inhabitants made use of canoes of all sizes, were armed with slings, darts, and wooden swords, wore necklaces and bracelets of pearl, and rings in their noses. They were, however, very intractable, notwithstanding all the pains that could be taken to engage them in a fair correspondence; so that Captain Schovten was at last obliged to fire upon them, to prevent them from making themselves masters of his vessel, which they attacked with a great deal of vigour: and very probably this was the reason that Captain Tasman did not attempt to land, or make any farther discovery. On April 1<sup>st</sup>, we were in the latitude of  $4^{\circ} 30'$  south, and in the longitude of  $171^{\circ} 2'$ , the variation being  $8^{\circ} 45'$  to the east, having now sight of the coast of New Guinea; and endeavouring to double the cape which the Spaniards call Cobo Santa Maria, we continued to sail along the coast, which lies north-west. We afterwards passed the Islands of Antony Caens, Gardeners Island, and Fishers Island, advancing towards the promontory called Struis Hock, where the coast runs south, and south-east. We resolved to pursue the same route, and to continue steering south, till we should either discover land, or a passage on that side.

It is necessary to observe, that all this time they continued on the coast, not of New Guinea, but of New Britain; for that cape which the Spaniards called Santa Maria, is the very same that Captain Dampier called Cape St. George; and Caens, Gardeners, and Fishers Islands, all lie upon the same coast. They had been discovered by Schovten and Le Maire, who found them to be well inhabited, but by a very base and treacherous people; who, after making signs of peace, attempted to surprise their ships: and these islanders managed their slings with such force and dexterity, as to drive the Dutch sailors from their decks: which account of Le Maire's agree perfectly well with what Captain Dampier tells us of the same people. As for the continent of New Guinea, it lies quite behind the island of New Britain; and was therefore laid down, in all the charts before Dampier's discovery, at least  $4^{\circ}$  more to the east than it should have been.

15. On April 12<sup>th</sup>, in the latitude of  $3^{\circ} 45'$  south, and in the longitude of  $167^{\circ}$ , we found the variation  $10^{\circ}$  towards the east. That night part of the crew were wakened out of their sleep by an earthquake. They immediately ran upon deck, supposing that the ship had struck. On heaving the lead, however, there was no bottom to be found. We had afterwards several shocks; but none of them so violent as the first. We had then doubled the Struis Hock, and were, at that time, in the bay of Good Hope. On the 14<sup>th</sup>, in the latitude of  $5^{\circ} 27'$  south, and in the longitude of  $166^{\circ} 57'$ , we observed the variation to be  $9^{\circ} 15'$  to the east. The land lay then north-east, east north-east, and again south south-west; so that we imagined there had been a passage  
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between those two points : but we were soon convinced of our mistake, and that it was all one coast ; so that we were obliged to double the West Cape, and to continue creeping along-shore, and were much hindered in our passage by calms. This description agrees very well with that of Schovten and Le Maire ; so that probably they had now sight again of the coast of New Guinea.

It is very probable, from the accident that happened to Captain Tasman, and which also happened to others upon that coast, and from the burning mountains that will be hereafter mentioned, that this country is very subject to earthquakes ; and, if so, without doubt, it abounds with metals and minerals ; of which we have also another proof, from a point in which all these writers agree ; viz. that the people they saw had rings in their noses and ears, though none of them tell us of what metal those rings were made, which Le Maire might easily have done, since he carried off a man from one of the islands, whose name was Moses, from whom he learned that almost every nation on this coast speaks a different language.

16. On the 20th, in the latitude of  $5^{\circ} 4'$  south, and in the longitude  $164^{\circ} 27'$ , we found the variation  $8^{\circ} 30'$  east. We that night drew near the Brandande Yland, i. e. burning island, which William Schovten mentions ; and we perceived a great flame issuing, as he says, from the top of an high mountain. When we were between that island and the continent, we saw a vast number of fires along the shore, and half-way up the mountain, from whence we concluded that the country must be very populous. We were often detained on this coast by calms, and frequently observed small trees, bamboes and shrubs, which the rivers on that coast carried into the sea ; from which we inferred, that this part of the country was extremely well watered, and that the land must be very good. The next morning we passed the burning mountain, and continued a west north-west course along that coast.

It is remarkable, that Schovten had made the same observation with respect to the drift-wood forced by the rivers into the sea. He likewise observed, that there was so copious a discharge of fresh water, that it altered the colour and the taste of the sea. He likewise says that the burning island is extremely well peopled, and also well cultivated. He afterwards anchored on the coast of the continent, and endeavoured to trade with the natives, who made him pay very dear for hogs and cocoa-nuts, and likewise shewed him some ginger. It appears from Captain Tasman's account, that he was now in haste to return to Batavia, and did not give himself so much trouble as at the beginning about discoveries, and, to say the truth, there was no great occasion, if, as I observed, his commission was no more than to sail round the new discovered coasts, in order to lay them down with greater certainty in the Dutch charts.

17. On the 27th, being in the latitude of  $2^{\circ} 10'$  south, and in the longitude of  $146^{\circ} 57'$ , we fancied that we had a sight of the island of Moa ; but it proved to be that of Jama, which lies a little to the east of Moa. We found here great plenty of cocoa-nuts, and other refreshments. The inhabitants were absolutely black, and could easily repeat the words that they heard others speak ; which shews their own to be a very copious language. It is, however, exceedingly difficult to pronounce, because they make frequent use of the letter R ; and sometimes to such a degree, that it occurs twice or thrice in the same word. The next day, we anchored on the coast of the island of Moa, where we likewise found abundance of refreshments, and where we were obliged by bad weather to stay till May 9th. We purchased there, by way of exchange, six thousand cocoa-nuts, and a hundred bags of pyfanghs, or Indian figs. When we first began to trade with these people, one of our seamen was wounded by an arrow, that one of the natives let fly, either through malice or inadvertency. We were, at  
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that very juncture, endeavouring to bring our ships close to the shore; which so terrified these islanders, that they brought of their own accord on board us, the man who had shot the arrow, and left him at our mercy. We found them, after this accident, much more tractable than before in every respect. Our sailors, therefore, pulled off the iron hoops from some of the old water-casks, stuck them into wooden handles, and filing them to an edge, sold these awkward knives to the inhabitants for their fruits.

In all probability they had not forgot what happened to our people on July 16th, 1616, in the days of William Schovten: these people, it seems, treated him very ill; upon which James le Maire brought his ship close to the shore, and fired a broadside through the woods; the bullets, flying through the trees, struck the negroes with such a panic, that they fled in an instant up into the country, and durst not shew their heads again till they had made full satisfaction for what was past, and thereby secured their safety for the time to come; and he traded with them afterwards very peaceably, and with mutual satisfaction.

This account of our author's seems to have been taken upon memory, and is not very exact. Schovten's seamen, or rather the petty officer who commanded his long-boat, insulted the natives grossly, before they offered any injury to his people; and then, notwithstanding they fired upon them with small arms, the islanders obliged them to retreat; so that they were forced to bring the great guns to bear upon the island before they could reduce them. These people do not deserve to be treated as savages, because Schovten acknowledges, that they had been engaged in commerce with the Spaniards; as appeared by their having iron pots, glass beads and pendants, with other European commodities, before he came thither. He also tells us, that they were a very civilized people, their country well cultivated, and very fruitful; that they had a great many boats, and other small craft, which they navigated with great dexterity. He adds also, that they gave him a very distinct account of the neighbouring islands, and that they solicited him to fire upon the Arimoans, with whom it seems they are always at war; which, however, he refused to do, unless provoked to it by some injury offered by those people. It is therefore very apparent, that the inhabitants of Moa are a people with whom any Europeans, settled in their neighbourhood, might without any difficulty settle a commerce, and receive considerable assistance from them in making discoveries. But, perhaps, some nations are fitter for these kind of expeditions than others, as being less apt to make use of their artillery and small arms upon every little dispute; for as the inhabitants of Moa are well enough acquainted with the superiority which the Europeans have over them, it cannot be supposed, that they will ever hazard their total destruction by committing any gross act of cruelty upon strangers, who visit their coast; and it is certainly very unfair, to treat people as savages and barbarians, merely for defending themselves when insulted or attacked without cause. The instance Captain Tasman gives us of their delivering up the man who wounded his sailor, is a plain proof of this; and as to the diffidence and suspicion which some later voyagers have complained of, with respect to the inhabitants of this island, they must certainly be the effects of the bad behaviour of such Europeans as this nation have hitherto dealt with, and would be effectually removed, if ever they had a settled experience of a contrary conduct. The surest method of teaching people to behave honestly towards us, is to behave friendly and honestly towards them, and then there is no great reason to fear, that such as give evident proofs of capacity and civility in the common affairs of life, should be guilty of treachery that must turn to their own disadvantage.

18. On the 12th of May, being then in the latitude of  $54'$  south, and in the longitude of  $153^{\circ} 17'$ , we found the variation  $6^{\circ} 30'$  to the east. We continued coasting the north-side of the island of William Schovten, which is about eighteen or nineteen miles long, very populous, and the people very brisk and active. It was with great caution that Schovten gave his name to this island, for having observed that there were abundance of small islands laid down in the charts on the coast of New Guinea, he was suspicious, that this might be of the number. But since that time, it seems a point generally agreed, that this island had not before any particular name; and therefore, in all subsequent voyages, we find it constantly mentioned by the name of Schovten's Island.

He describes it as a very fertile and well-peopled island; the inhabitants of which were so far from discovering any thing of a savage nature, that they gave apparent testimonies of their having had an extensive commerce before he touched there, since they not only shewed him various commodities from the Spaniards, but also several samples of China ware; he observes, that they are very unlike the nations he had seen before, being rather of an olive-colour, than black; some having short, others long hair, dressed after different fashions; they were also a taller, stronger and stouter people, than their neighbours. These little circumstances, which may seem tedious or trifling to such as read only for amusement, are, however, of very great importance to such as have discoveries in view; because they argue, that these people have a general correspondence; the difference of their complexion must arise from a mixed descent; and the different manner of wearing their hair is undoubtedly owing to their following the fashion of different nations, as their fancies lead them. He farther observes, that their vessels were larger and better contrived than their neighbours; that they readily parted with their bows and arrows in exchange for goods, and that they were particularly fond of glass and iron-ware, which, perhaps, they not only used themselves, but employed likewise in their commerce. The most western point of the island he called the Cape of Good Hope, because, by doubling that cape, he expected to reach the island of Banda; and that we may not wonder, that he was in doubts and difficulties as to the situation of these places, we ought to reflect, that Schovten was the first who sailed round the world by this course, and the last too, except Commodore Roggewein; other navigators chusing rather to run as high as California, and from thence to the Ladrone islands, merely because it is the ordinary route.

In the neighbourhood of this island Schovten also met with an earthquake, which alarmed the ship's company excessively, from an apprehension, that they had struck upon a rock. There are some other islands in the neighbourhood of this, well peopled, and well planted, abounding with excellent fruits, especially of the melon kind. These islands lie, as it were, on the confines of the southern continent, and the East Indies, so that their inhabitants enjoy all the advantages resulting from their own happy climate, and from their traffick with their neighbours, especially with those of Ternate and Amboyna, who come thither yearly to purchase their commodities, and who are likewise visited, at certain seasons, by the people of these islands in their turn.

19. On the 18th of May, in the latitude of  $26'$  south, and in the longitude of  $147^{\circ} 55'$ , we observed the variation to be  $5^{\circ} 30'$  east. We were now arrived at the western extremity of New Guinea, which is a detached point or promontory (though it is not marked so even in the latest maps); here we met with calms, variable and contrary winds, with much rain; from thence we steered for Ceram, leaving the cape on the north, and arrived safely on that island; by this time Captain

Tasman had fairly surrounded the continent he was instructed to discover, and had therefore nothing now farther in view than to return to Batavia, in order to report the discoveries he had made.

On the 27th of May, we passed through the Streights of Boura, or Bouton, and continued our passage to Batavia, where we arrived on the 15th of June, in the latitude of  $6^{\circ} 12'$  south, and in the longitude of  $127^{\circ} 18'$ . This voyage was made in the space of ten months. Such was the end of this expedition, which has been always considered as the clearest and most exact that was ever made for the discovery of the Terra Australis Incognita, from whence that chart and map was laid down in the pavement of the stadthouse at Amsterdam, as is before-mentioned. We have now nothing to do but to shut up this voyage and our history of circumnavigators, with a few remarks, previous to which it will be requisite to state clearly and succinctly the discoveries, either made or confirmed by Captain Tasman's voyage, that the importance of it may fully appear, as well as the probability of our conjectures with regard to the motives that induced the Dutch East India Company to be at so much pains about these discoveries.

20. In the first place, then, it is most evident, from Captain Tasman's voyage, that New Guinea, Carpentaria, New Holland, Antony van Diemen's Land, and the countries discovered by De Quiros, make all one continent, from which New Zealand seems to be separated by a strait; and, perhaps, is part of another continent, answering to Africa, as this, of which we are now speaking, plainly does to America. This continent reaches from the equinoctial to  $44^{\circ}$  of south latitude, and extends from  $122^{\circ}$  to  $188^{\circ}$  of longitude, making indeed a very large country, but nothing like what De Quiros imagined; which shews how dangerous a thing it is to trust too much to conjecture in such points as these. It is, secondly, observable, that as New Guinea, Carpentaria and New Holland, had been already pretty well examined, Captain Tasman fell directly to the south of these; so that his first discovery was Van Diemen's Land, the most southern part of the continent on this side the globe, and then, passing round by New Zealand, he plainly discovered the opposite side of that country towards America, though he visited the islands only, and never fell in again with the continent till he arrived on the coast of New Britain, which he mistook for that of New Guinea; as he very well might, that country having never been suspected to be an island, till Dampier discovered it to be such in the beginning of the present century. Thirdly, by this survey, these countries are for ever marked out, so long as the map, or memory of this voyage, shall remain. The Dutch East India Company have it always in their power to direct settlements, or new discoveries, either in New Guinea, from the Moluccas, or in New Holland, from Batavia directly. The prudence shewn in the conduct of this affair, deserves the highest praise. To have attempted heretofore, or even now, the establishing colonies in those countries, would be impolitic, because it would be grasping more than the East India Company, or than even the republic of Holland, could manage; for, in the first place, to reduce a continent between three and four thousand miles broad, is a prodigious undertaking, and to settle it by degrees, would be to open, to all the world, the importance of that country, which, for any thing we can tell, may be much superior to any country yet known: the only choice therefore that the Dutch had left, was to reserve this mighty discovery till the season arrived, in which they should be either obliged by necessity, or invited by occasion, to make use of it; but though this country be reserved, it is no longer either unknown or neglected by the Dutch, which is a point of very great consequence. To the other nations of Europe, the southern continent is a chimera, a thing in the clouds, or at least a country about which

there are a thousand doubts and suspicions, so that to talk of discovering or settling it must be regarded as an idle and empty project: but, with respect to them, it is a thing perfectly well known; its extent, its boundaries, its situation, the genius of its several nations, and the commodities of which they are possessed, are absolutely within their cognizance, so that they are at liberty to take such measures as appear to them best, for securing the eventual possession of this country, whenever they think fit. This account explains at once all the mysteries which the best writers upon this subject have found in the Dutch proceedings. It shews why they have been at so much pains to obtain a clear and distinct survey of these distant countries; why they have hitherto forbore settling, and why they take so much pains to prevent other nations from coming at a distinct knowledge of them: and I may add to this another particular, which is, that it accounts for their permitting the natives of Amboyna, who are their subjects, to carry on a trade to New Guinea, and the adjacent countries, since, by this very method, it is apparent that they gain daily fresh intelligence as to the product and commodities of those countries. Having thus explained the consequence of Captain Tasman's voyage, and thereby fully justified my giving it a place in this part of my work, I am now at liberty to pursue the reflections with which I promised to close this section, and the history of circumnavigators, and in doing which, I shall endeavour to make the reader sensible of the advantages that arise from publishing these voyages in their proper order, so as to shew what is, and what is yet to be discovered of the globe on which we live.

21. In speaking of the consequences of Captain Tasman's voyage, it has been very amply shewn that this part of Terra Australis, or southern country, has been fully and certainly discovered. To prevent, however, the reader's making any mistake, I will take this opportunity of laying before him some remarks on the whole southern hemisphere, which will enable him immediately to comprehend all that I have afterwards to say on this subject.

If we suppose the south pole to be the centre of a chart of which the equinoctial is the circumference, we shall then discern four quarters, of the contents of which, if we could give a full account, this part of the world would be perfectly discovered. To begin then with the first of these, that is, from the first meridian, placed in the island of Ferro. Within this division, that is to say, from the first to the nineteenth degree of longitude, there lies the great continent of Africa, the most southern point of which is the Cape of Good Hope, lying in the latitude of  $34^{\circ} 15'$  south: between that and the pole, several small but very inconsiderable islands have been discovered, affording us only this degree of certainty, that to the latitude of  $50^{\circ}$  there is no land to be found of any consequence; there was, indeed, a voyage made by Mr. Bovet in the year 1738, on purpose to discover whether there were any lands to the south in that quarter or not. This gentleman sailed from Port l'Orient July the 18th, 1738, and on the 1st of January, 1739, discovered a country, the coasts of which were covered with ice, in the latitude of  $54^{\circ}$  south, and in the longitude of  $28^{\circ} 30'$ ; the variation of the compass being there  $6^{\circ} 45'$  to the west.

In the next quarter, that is to say, from  $90^{\circ}$  longitude to  $180^{\circ}$ , lie the countries of which we have been speaking, or that large southern island, extending from the equinoctial to the latitude of  $43^{\circ} 10'$ , and the longitude of  $167^{\circ} 55'$ , which is the extremity of Van Diemen's land.

In the third quarter, that is, from the longitude of  $150^{\circ}$  to  $170^{\circ}$ , there is very little discovered with any certainty. Captain Tasman, indeed, visited the coast of New Zealand, in the latitude of  $42^{\circ} 10'$  south, and in the longitude of  $188^{\circ} 28'$ : but besides this, and the islands of Amsterdam and Rotterdam, we know very little; and there-



fore, if there be any doubts about the reality of Terra Australis, it must be with respect to that part of it which lies within this quarter, through which Schovten and Le Maire failed, but without discovering any thing more than a few small islands.

The fourth and last quarter is from  $270^{\circ}$  of longitude to the first meridian, within which lies the continent of South America, and the island of Terra del Fuego; the most southern promontory of which is supposed to be Cape Horn, which, according to the best observations, is in the latitude of  $56^{\circ}$ , beyond which there has been nothing with any degree of certainty discovered on this side.

On the whole, therefore, it appears there are three continents already tolerably discovered which point towards the south pole, and therefore it is very probable there is a fourth, which if there be, it must lie between the country of New Zealand, discovered by Captain Tasman, and that country which was seen by Captain Sharpe and Mr. Wafer in the South Seas, to which land therefore, and no other, the title of Terra Australis Incognita properly belongs. Leaving this, therefore, to the industry of future ages to discover, we will now return to that great southern island which Captain Tasman actually surrounded, and the bounds of which are tolerably well known.

In order to give the reader a proper idea of the importance of this country, it will be requisite to say something of the climates in which it is situated: as it lies from the equinoctial to near the latitude of  $44^{\circ}$ , the longest day in the most northern parts must be twelve hours, and in the southern about fifteen hours, or somewhat more, so that it extends from the first to the seventh climate, which shews its situation to be the happiest in the world, the country called Van Diemen's Land resembling in all respects the south of France: as there are in all countries some parts more pleasant than others, so there seems good reason to believe, that within two or three degrees of the tropic of Capricorn, which passes through the midst of New Holland, is the most unwholesome and disagreeable part of this country; the reason of which is very plain: for in those parts it must be excessively hot, much more so than under the line itself, since the days and nights are there always equal, whereas, within three or four degrees of the tropic of Capricorn, that is to say, in the latitude of  $27^{\circ}$  south, the days are thirteen hours and a half long, and the sun is twice in their zenith, first in the beginning of December or rather in the latter end of November, and again when it returns back, which occasions a burning heat for about two months, or something more; whereas, either farther to the south, or nearer to the line, the climate must be equally wholesome and pleasant.

As to the product and commodities of this country in general, there is the greatest reason in the world to believe, that they are extremely rich and valuable, because the richest and finest countries in the known world lie all of them within the same latitude; but to return from conjectures to facts: the country discovered by De Quiros, makes a part of this great island, and is the opposite coast to that of Carpentaria. This country, of which we have given a large account in the tenth section, the discoverer called La Australia del Espiritu Santo, in the latitude of  $15^{\circ} 40'$  south; and, as he reports, it abounds with gold, silver, pearl, nutmegs, mace, ginger and sugar-canes, of an extraordinary size; I do not wonder, that formerly the fact might be doubted, but at present I think there is sufficient reason to induce us to believe it, for Captain Dampier describes the country about Cape St. George and Port Mountague, which are within  $9^{\circ}$  of the country described by De Quiros; I say, Captain Dampier describes what he saw in the following words: "The country hereabouts is mountainous and woody, full of rich valleys and pleasant fresh-water brooks; the mould in the valleys is deep and yellowish, that on the sides of the hills of a very brown colour, and



and not very deep, but rocky underneath, yet excellent planting land; the trees in general are neither very strait, thick, nor tall, yet appear green and pleasant enough; some of them bear flowers, some berries and others big fruits, but all unknown to any of us; cocoa-nut trees thrive very well here, as well on the bays by the sea-side, as more remote among the plantations; the nuts are of an indifferent size, the milk and kernel very thick and pleasant; here are ginger, yams, and other very good roots for the pot, that our men saw and tasted; what other fruits or roots the country affords, I know not; here are hogs and dogs, other land animals we saw none; the fowls we saw and knew were pigeons, parrots, cocadores and crows, like those in England; a sort of birds about the bigness of a black-bird, and smaller birds many. The sea and rivers have plenty of fish; we saw abundance, though we caught but few, and these were cavallies, yellow-tails and whip-wreys."

This account is grounded only on a very slight view, whereas De Quiros resided for some time in the place he has mentioned. In another place Captain Dampier observes, that he saw nutmegs amongst them, which seemed to be fresh-gathered, all which agrees perfectly with the account given by De Quiros; add to this, that Schouten had likewise observed, that they had ginger upon this coast, and some other spices, so that on the whole, there seems not the least reason to doubt, that if any part of this country was settled, it must be attended with a very rich commerce; for it cannot be supposed, that all these writers should be either mistaken, or that they should concur in a design to impose upon their readers; which is the less to be suspected, if we consider how well their reports agree with the situation of the country, and that the trees on the land, and the fish on the coast, corresponding exactly with the trees of those countries, and the fish on the coasts, where these commodities are known to abound within-land, seem to intimate a perfect conformity throughout.

The next thing to be considered is, the possibility of planting in this part of the world; which, at first sight, I must confess, seems to be attended with considerable difficulties with respect to every other nation except the Dutch, who, either from Batavia, the Moluccas, or even from the Cape of Good Hope, might with ease settle themselves where-ever they thought fit; as, however, they have neglected this for above a century, there seems to be no reason, why their conduct in this respect should become the rule of other nations, or why any other nation should be apprehensive of drawing on herself the displeasure of the Dutch, by endeavouring to turn to their benefit countries the Dutch have so long suffered to lie, with respect to Europe, waste and desert.

The first point, with respect to a discovery, would be, to send a small squadron on the coast of Van Diemen's Land, and from thence round, in the same course taken by Captain Tasman, by the coast of New Guinea, which might enable the nations that attempted it to come to an absolute certainty with regard to its commodities and commerce: such a voyage as this might be performed with very great ease, and at a small expence, by our East India company; and, this in the space of eight or nine months time; and considering what mighty advantages might accrue to the nation, there seems to be nothing harsh or improbable in supposing that, some time or other, when the legislature is more than usually intent on affairs of commerce, they may be directed to make such an expedition at the expence of the public. By this means all the back coast of New Holland and New Guinea, might be thoroughly examined, and we might know as well, and as certainly as the Dutch, how far a colony settled there might answer our expectations; one thing is certain, that to persons used to the navigation of the Indies, such an expedition could not be thought either dangerous or difficult, because

because it is already sufficiently known, that there are every-where islands upon the coast, where ships, upon such a discovery, might be sure to meet with refreshments, as is plain from Commodore Roggewein's voyage, made little more than twenty years ago.

The only difficulty that I can see, would be the getting a fair and honest account of this expedition, when made; for private interest is so apt to interfere, and get the better of the public service, that it is very hard to be sure of any thing of this sort. That I may not be suspected of any intent to calumniate, I shall put the reader in mind of two instances; the first is, as to the new trade from Russia, for establishing of which an act of parliament was with great difficulty obtained, though visibly for the advantage of the nation: the other instance is, the voyage of Captain Middleton, for the discovery of a north-west passage into the south seas, which is ended by a very warm dispute, whether that passage be found or not, the person supposed to have found it maintaining the negative.

Whenever, therefore, such an expedition is undertaken, it ought to be under the direction, not only of a person of parts and experience, but of unspotted character, who, on his return, should be obliged to deliver his journal upon oath, and the principal officers under him should likewise be directed to keep their journals distinctly, and without their being inspected by the principal officer; all which journals ought to be published by authority as soon as received, that every man might be at liberty to examine them, and deliver his thoughts as to the discoveries made, or the impediments suggested to have hindered or prevented such discoveries, by which means the public would be sure to obtain a full and distinct account of the matter; and it would thence immediately appear, whether it would be expedient to prosecute the design or not.

But if it should be thought too burdensome for a company in so flourishing a condition, and consequently engaged in so extensive a commerce as the East India Company is, to undertake such an expedition, merely to serve the public, promote the exportation of our manufactures, and increase the number of industrious persons who are maintained by foreign trade; if this, I say, should be thought too grievous for a company that has purchased her privileges from the public, by a large loan at low interest, there can certainly be no objection to the putting this project into the hands of the Royal African Company, who are not quite in so flourishing a condition; they have equal opportunities for undertaking it, since the voyage might be with great ease performed from their settlements in ten months, and if the trade was found to answer, it might encourage the settling a colony at Madagascar, to and from which ships might, with the greatest conveniency, carry on the trade to New Guinea. I cannot say how far such a trade might be consistent with their present charter; but if it should be found advantageous to the public, and beneficial to the company, I think there can be no reason assigned why it should not be secured to them, and that too in the most effectual manner.

A very small progress in it would restore the reputation of the company, and in time, perhaps, free the nation from the annual expence she is now at, for the support of the forts and garrisons belonging to that company on the coasts of Africa; which would alone prove of great and immediate service, both to the public and to the company: to say the truth, something of this sort is absolutely necessary to vindicate the expence the nation is at; for if the trade, for the carrying on of which a company is established, proves, by a change of circumstances, incapable of supporting that company, and thereby brings a load upon the public, this ought to be a motive, it ought, indeed, to be the strongest motive, for that company to endeavour the extension of its commerce,

or

or the flaking out, if possible, some new branch of trade, which may restore it to its former splendour; and in this as it hath an apparent right, so there is not the least reason to doubt, that it would meet with all the countenance and assistance from the government that it could reasonably expect or desire.

If such a design should ever be attempted, perhaps the island of New Britain might be the properest place for them to settle. As to the situation, extent, and present condition of that island, all that can be said of it must be taken from the account given by its discoverer Captain Dampier: which, in few words, amounts to this: "The island which I call Nova Britannia has about  $4^{\circ}$  of latitude, the body of it lying in  $4^{\circ}$ , the northermost part in  $2^{\circ} 30'$ , and the southermost in  $6^{\circ} 30'$ . It has about  $5^{\circ} 18'$  longitude from east to west; it is generally high mountainous land, mixed with large valleys, which, as well as the mountains, appeared very fertile; and in most places that we saw, the trees are very large, tall, and thick. It is also very well inhabited, with strong well-limbed negroes, whom we found very daring and bold at several places: as to the product of it, it is very probable, this island may afford as many rich commodities as any in the world; and the natives may be easily brought to commerce, though I could not pretend to it in my circumstances." If any objections should be raised from Dampier's misfortune in that voyage, it is easy to shew, that it ought to have no manner of weight whatever, since, though he was an excellent pilot, he is allowed to have been but a bad commander: besides the Roebuck, in which he failed, was a worn-out frigate, that would hardly swim; and it is no great wonder, that in so crazy a vessel the people were a little impatient at being abroad on discoveries; yet, after all, he performed what he was sent for; and, by the discovery of this island of New Britain, secured us an indisputable right to a country, that is, or might be made, very valuable.

It is so situated, that a great trade might be carried on from thence through the whole Terra Australis on one side, and the most valuable islands of the East-Indies on the other. In short, all, or at least most, of the advantages proposed by the Dutch West-India Company's joining with their East-India Company, of which a large account has already been given, might be procured for this nation, by the establishing a colony in this island of New Britain, and securing the trade of that colony to the African Company by law; the very passing of which law would give the company more than sufficient credit, to fit out a squadron at once capable of securing the possession of that island, and of giving the public such satisfaction as to its importance, as might be requisite to obtain further power and assistance from the state, if that should be found necessary. It would be very easy to point out some advantages peculiarly convenient for that company; but it will be time enough to think of these, whenever the African Company shall discover an inclination to prosecute this design. At present I have done what I proposed, and have shewn that such a collection of voyages as this, ought not to be considered as a work of mere amusement, but as a work calculated for the benefit of mankind in general, and of this nation in particular, which it is the duty of every man to promote in his station; and whatever fate these reflections may meet with, I shall always have the satisfaction of remembering, that I have not neglected it in mine, but have taken the utmost pains to turn a course of laborious reading to the advantage of my country.

But, supposing that neither of these companies should think it expedient, or, in other words, should not think it consistent with their interest, to attempt this discovery, there is yet a third company, within the spirit of whose charter, I humbly conceive, the prosecution of such a scheme immediately lies. The reader will easily discern, that I mean the company for carrying on a trade to the South Seas, who, notwithstanding the exten-

siveness

liveness of their charter, confirmed and supported by authority of parliament, have not, so far as my information reaches, ever attempted to send so much as a single ship for the sake of discoveries into the South Seas, which, however, was the great point proposed when this company was first established. In order to prove this, I need only lay before the reader the limits assigned that company by their charter, the substance of which is contained in the following words:—

“ The corporation, and their successors, shall, for ever, be vested in the sole trade into and from all the kingdoms and lands on the east side of America, from the River Oroonoco, to the southernmost part of Terra del Fuego, and on the west side thereof from the said southernmost part of Terra del Fuego, through the South Sea, to the northernmost part of America, and into and through all the countries, islands, and places within the said limits, which are reputed to belong to Spain, or which shall hereafter be found out and discovered within the limits aforesaid, not exceeding 300 leagues from the continent of America, between the southernmost part of the Terra del Fuego and the northernmost part of America, on the said west side thereof, except the kingdom of Brazil, and such other places on the east side of America, as are now in the possession of the King of Portugal, and the country of Surinam, in the possession of the States-general. The said company, and none else, are to trade within the said limits; and, if any other persons shall trade to the South Seas, they shall forfeit the ship and goods, and double value, one-fourth part to the crown, and another fourth part to the prosecutor, and the other two-fourths to the use of the company. And the company shall be the sole owners of the islands, forts, &c. which they shall discover within the said limits, to be held of the crown, under an annual rent of an ounce of gold, and of all ships taken as prizes by the ships of the said company: and the company may seize, by force of arms, all other British ships trading in those seas.”

It is, I think, impossible for any man to imagine, that either these limits should be secured to the company for no purpose in the world; or that these prohibitions and penalties should take place, notwithstanding the company's never attempting to make any use of these powers: from whence I infer, that it was the intent of the legislature, that new discoveries should be made, new plantations settled, and a new trade carried on, by this new corporation, agreeable to the rules prescribed, and for the general benefit of this nation; which I apprehend was chiefly considered in the providing, that this new commerce should be put under the management of a particular company. But I am very well aware of an objection that may be made to what I have advanced; viz. that, from my own shewing, this southern continent lies absolutely without their limits; and that there is also a proviso in the charter of that company, that seems particularly calculated to exclude it, since it recites, that

“ The agents of the company shall not sail beyond the southernmost parts of Terra del Fuego, except through the Straights of Magellan, or round Terra del Fuego; nor go from thence to any part of the East Indies, nor return to Great Britain, or any port or place, unless through the said streights, or by Terra del Fuego: nor shall they trade in East-India goods, or in any places within the limits granted to the united company of merchants of England trading to East India (such India goods excepted as shall be actually exported from Great Britain, and also such gold, silver, wrought plate, and other goods and commodities, which are the produce, growth, or manufactures of the West Indies, or continent of America): neither shall they send ships, or use them or any vessel, within the South Seas, from Terra del Fuego to the northernmost parts of America, above three hundred leagues to the westward of, and distant from the land of Chili, Peru, Mexico, California, or any other the lands or shores of

Southern or Northern America, between Terra del Fuego and the northernmost part of America, on pain of the forfeiture of the ships and goods; one-third to the crown, and the other two-thirds to the East India Company."

But the reader will observe, that I mentioned the East India and African Companies before; and that I now mention the South Sea Company, on a supposition that the two former may refuse it. In that case, I presume, the legislature will make the same distinction that the States of Holland did, and not suffer the private advantage of any particular company to stand in competition with the good of a whole people. It was upon this principle that I laid it down as a thing certain, that the African Company would be allowed to settle the island of Madagascar, though it lies within the limits of the East India Company's charter, in case it should be found necessary for the better carrying on of this trade. It is upon the same principle I say this southern continent lies within the intention of the South Sea Company's charter, because, I presume, the intent of that charter was to grant them all the commerce in those seas, not occupied before by British subjects; for, if it were otherwise, what a condition should we be in as a maritime power? If a grant does not oblige a company to carry on a trade within the limits granted to that company, and is, at the same time, of force to preclude all the subjects of this nation from the right they before had to carry on a trade within those limits, such a law is plainly destructive to the nation's interest, and to commerce in general. I therefore suppose, that, if the South Sea Company should think proper to revive their trade in the manner I propose, this proviso would be explained by parliament to mean no more than excluding the South Sea Company from settling or trading in or to any place at present settled in or traded to by the East India Company: for, as this interpretation would secure the just rights of both companies, and, at the same time, reconcile the laws for establishing them to the general interest of trade and the nation, there is the greatest reason to believe this to be the intention of the legislature. I have been obliged to insist fully upon this matter, because it is a point hitherto untouched, and a point of such high importance, that, unless it be understood according to my sense of the matter, there is an end of all hopes of extending our trade on this side, which is perhaps the only side, on which there is the least probability that it ever can be extended: for, as to the north-west passage into the South Seas, that seems to be blocked up by the rights of another company; so that, according to the letter of our laws, each company is to have its rights, and the nation in general no right at all.

If therefore the settling of this part of Terra Australis should devolve on the South Sea Company, by way of equivalent for the loss of their Asiento contract, there is no sort of question but it might be as well performed by them as by any other, and the trade carried on without interfering with that which is at present carried on, either by the East India or African Companies. It would indeed, in this case, be absolutely necessary to settle Juan Fernandez, the settlement of which place, under the direction of that company, if they could, as very probably they might, fall into some share of the slave-trade from New Guinea, must prove wonderfully advantageous, considering the opportunity they would have of vending those slaves to the Spaniards in Chili and Peru. The settling of this island ought to be performed at once, and with a competent force, since, without doubt, the Spaniards would leave no means unattempted to dispossess them: yet, if a good fortification was once raised, the passes properly retrenched and a garrison left there of between three and five hundred men, it would be simply impossible for the Spaniards to force them out of it before the arrival of another squadron from hence. Neither do I see any reason, why, in the space of a very few years, the plantation of this island should not prove of as great consequence to the South Sea Company,

Company, as that of Curacao to the Dutch West India Company, who raise no less than sixty thousand florins per annum for licensing ships to trade there.

From Juan Fernandez to Van Diemen's Land is not above two months sail; and a voyage for discovery might be very conveniently made between the time that a squadron returned from Juan Fernandez, and another squadron's arrival there from hence. It is true, that, if once a considerable settlement was made in the most southern part of Terra Australis, the company might then fall into a large commerce in the most valuable East India goods, very probably gold, and spices of all sorts: yet I cannot think, that even these would fall within the exclusive proviso of their charter; for that was certainly intended to hinder their trading in such goods as are brought hither by our East India Company; and I must confess I see no difference, with respect to the interest of that company, between our having cloves, cinnamon, and mace, by the South Sea Company's ships from Juan Fernandez, and our receiving them from Holland, after the Dutch East India Company's ships have brought them thither by the way of the Cape of Good Hope. Sure I am they would come to us sooner by some months by the way of Cape Horne. If this reasoning does not satisfy people, but they still remain persuaded, that the South Sea Company ought not to intermeddle with the East India trade at all, I desire to know, why the West India merchants are allowed to import coffee from Jamaica, when it is well known, that the East India Company can supply the whole demand of this kingdom from Mocha? If it be answered, that the Jamaica coffee comes cheaper, and is the growth of our own plantations, I reply, that these spices will not only be cheaper but better, and be purchased by our own manufacturers; and these, I think, are the strongest reasons that can be given.

If it be demanded, what certainty I have, that spices can be had from thence, I answer; all the certainty that in a thing of this nature can be reasonably expected: Ferdinand de Quiros met with all sorts of spices in the country he discovered; William Schouten, and Jaques le Maire, saw ginger and nutmegs; so did Dampier; and the author of Commodore Roggewein's Voyage asserts, that the free burghesses of Amboyna purchase nutmegs from the natives of New Guinea for bits of iron. All therefore I contend for is, that these bits of iron may be sent them from Old England.

The reason I recommend settling on the south coast of Terra Australis, if this design should be prosecuted, from Juan Fernandez, rather than the island of New Britain, which I mentioned before, is, because that coast is nearer, and is situated in a better and pleasanter climate. Besides all which advantages, as it was never hitherto visited by the Dutch, they cannot with any colour of justice, take umbrage at our attempting such a settlement. To close then this subject, the importance of which alone inclined me to spend so much of mine and the reader's time about it:

It is most evident, that, if such a settlement was made at Juan Fernandez, proper magazines erected, and a constant correspondence established between that island and the Terra Australis, these three consequences must absolutely follow from thence: 1. That a new trade would be opened, which must carry off a great quantity of our goods and manufactures, that cannot, at present, be brought to any market, or at least not to so good a market, as if there was a greater demand for them. 2. It would render this navigation, which is at present so strange, and consequently so terrible, to us, easy and familiar; which might be attended with advantages that cannot be foreseen, especially since there is, as I before observed, in all probability another southern continent, which is still to be discovered. 3. It would greatly increase our shipping and our seamen, which are the true and natural strength of this country, extend our naval power, and raise the reputation of this nation; the most distant prospect of which is



sufficient to warm the soul of any man who has the least regard for his country, with courage sufficient to despise the imputations that may be thrown upon him as a visionary projector, for taking so much pains about an affair that can tend so little to his private advantage. We will now add a few words, with respect to the advantages arising from having thus digested the history of circumnavigators, from the earliest account of time to the present ; and then shut up the whole with another section, containing the last circumnavigation by Rear-Admiral Anson, whose voyage has at least shewn, that, under a proper officer, English seamen are able to achieve as much as they ever did ; and that is as much as was ever done by any nation in the world.

It is a point that has always admitted some debate, whether science stands more indebted to speculation or practice ; or, in other words, whether the greater discoveries have been made by men of deep study, or persons of great experience in the most useful parts of knowledge. But this, I think, is a proposition that admits of no dispute at all, that the noblest discoveries have been the result of a just mixture of theory with practice. It was from hence, that the very notion of sailing round the earth took rise ; and the ingenious Genoese first laid down this system of the world, according to his conception, and then added the proofs derived from experience. It is much to be deplored, that we have not that plan of discovery which the great Christopher Columbus sent over thither by his brother Bartholomew to King Henry VII., for if we had we should certainly find abundance of very curious observations, which might still be useful to mariners : for it appears clearly, from many little circumstances, that he was a person of universal genius, and, until bad usage obliged him to take many precautions, very communicative.

It was from this plan, as it had been communicated to the Portuguese court, that the famous Magellan came to have so just notions of the possibility of sailing by the west to the East Indies ; and there was a great deal of theory in the proposal made by that great man to the Emperor Charles V. Sir Francis Drake was a person of the same genius, and of a like general knowledge ; and it is very remarkable, that these three great seamen met also with the same fate ; by which I mean, that they were constantly pursued by envy while they lived, which hindered so much notice being taken of their discourses and discoveries as they deserved. But when the experience of succeeding times had verified many of their sayings, which had been considered as vain and empty boastings in their life-times, then posterity began to pay a superstitious regard to whatever could be collected concerning them, and to admire all they delivered as oraculous. Our other discoverer, Candish, was likewise a man of great parts and great penetration, as well as a great spirit ; he had, undoubtedly, a mighty genius for discoveries ; but the prevailing notion of those times, that the only way to serve the nation, was plundering the Spaniards, seems to have got the better of his desire to find out unknown countries ; and made him choose to be known to posterity, rather as a gallant privateer than as an able seaman, though in truth he was both.

After these follow Schovten and Le Maire, who were fitted out to make discoveries ; and executed their commission with equal capacity and success. If Le Maire had lived to return to Holland, and to have digested into proper order his own accounts, we should, without question, have received a much fuller and clearer, as well as a much more correct and satisfactory detail of them, than we have at present : though the voyage, as it is now published, is, in all respects, the best, and the most curious, of all the circumnavigators. This was, very probably, owing to the ill usage he met with from the Dutch East India Company ; which put Captain Schovten, and the relations of Le Maire, upon giving the world the best information they could of what had been



in that voyage performed. Yet the fate of Le Maire had a much greater effect in discouraging, than the fame of his discoveries had in exciting, a spirit of emulation; so that we may safely say, the severity of the East India Company in Holland extinguished that generous desire of exploring unknown lands, which might otherwise have raised the reputation, and extended the commerce of the republic much beyond what they have hitherto reached. This is so true that for upwards of one hundred years, we hear of no Dutch voyage in pursuit of Le Maire's discoveries; and we see, when Commodore Roggewein, in our own time, revived that noble design, it was again cramped by the same power that stifled it before; and though the States did justice to the West India Company, and to the parties injured, yet the hardships they suffered, and the plain proof they gave of the difficulties that must be met with in the prosecution of such a design, seem to have done the business of the East India Company, and damped the spirit of discovery, for perhaps another century, in Holland.

It is very observable, that all the mighty discoveries that have been made arose from these great men, who joined reasoning with practice, and were men of genius and learning, as well as seamen. To Columbus we owe the finding America; to Magellan the passing by the straits which bear his name, by a new route to the East Indies; to Le Maire a more commodious passage round Cape Horn, and without running up to California; Sir Francis Drake too hinted the advantages that might arise by examining the north-west side of America; and Candish had some notions of discovering a passage between China and Japan. As to the history we have of Roggewein's voyage, it affords such lights, as nothing but our own negligence can render useless. But in the other voyages, whatever discoveries we meet with are purely accidental, except it be Dampier's voyage to the coasts of New Holland and New Guinea, which was expressly made for discoveries; and in which, if an abler man had been employed in conjunction with Dampier, we cannot doubt, that the interior and exterior of those countries would have been much better known than they are at present; because such a person would rather have chosen to have refreshed in the island of New Britain, or some other country not visited before, than at that of Timor, already settled both by the Portuguese and the Dutch.

In all attempts, therefore, of this sort, those men are fittest to be employed who, with competent abilities as seamen, have likewise general capacities, are at least tolerably acquainted with other sciences, and have settled judgments and solid understandings. These are the men from whom we are to expect the finishing that great work which former circumnavigators have begun; I mean the discovering every part and parcel of the globe, and the carrying to its utmost perfection the admirable and useful science of navigation.

It is, however, a piece of justice due to the memory of these great men, to acknowledge, that we are equally encouraged by their examples, and guided by their discoveries. We owe to them the being freed, not only from the errors, but from the doubts and difficulties, with which former ages were oppressed: to them we stand indebted for the discovery of the best part of the world, which was entirely unknown to the ancients, particularly some part of the eastern, most of the southern, and all the western hemisphere: from them we have learned, that the earth is furrounded by the ocean, and that all the countries under the torrid zone are inhabited; and that, quite contrary to the notions that were formerly entertained, they are very far from being the most sultry climate in the world, those within a few degrees of the tropics, though habitable, being much more hot, for reasons which have been elsewhere explained. By their voyages, and especially by the observations of Columbus, we have  
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been taught the general motion of the sea, the reason of it, and the cause and difference of currents in particular places; to which we may add the doctrine of tides, which were very imperfectly known, even by the greatest men in former times, whose accounts have been found equally repugnant to reason and experience.

By their observations, we have acquired a great knowledge as to the nature and variation of winds, particularly the monsoons, or trade-winds, and other periodical winds, of which the ancients had not the least conception: and by these helps we not only have it in our power to proceed much farther in our discoveries, but we are likewise delivered from a multitude of groundless apprehensions, that frightened them from prosecuting discoveries. We give no credit now to the fables, that not only amused antiquity, but even obtained credit within a few generations. The authority of Pliny will not persuade us that there are any nations without heads, whose eyes and mouths are in their breasts, or that the Arimaspi have only one eye, fixed in their forehead, and that they are perpetually at war with the Griffins, who guard hidden treasures; or that there are nations that have long hairy tails, and grin like monkeys. No traveller can make us believe, that, under the torrid zone, there are a nation, every man of which has one large flat foot, with which, lying upon his back, he covers himself from the sun. In this respect we have the same advantage over the ancients that men have over children; and we cannot reflect without amazement, on men's having so much knowledge and learning in other respects, with such childish understandings in these.

By the labours of these great men, in the two last centuries, we are taught to know what we seek, and how it is to be sought. We know, for example, what parts of the north are yet undiscovered, and also what parts of the south. We can form a very certain judgment of the climate of countries undiscovered, and can foresee the advantages that will result from discoveries before they are made; all which are prodigious advantages, and ought certainly to animate us in our searches. I might add to this, the great benefits we receive from our more perfect acquaintance with the properties of the loadstone, and from the surprising accuracy of astronomical observations; to which I may add the physical discoveries made of late years, in relation to the figure of the earth; all of which are the result of the lights which these great men have given us.

It is true, that some of the zealous defenders of the ancients, and some of the great admirers of the eastern nations, dispute these facts; and would have us believe that almost every thing was known to the old philosophers, and not only known but practised, by the Chinese, long before the time of the great men to whom we ascribe them. But the difference between their assertions and ours is, that we fully prove the facts we allege, whereas they produce no evidence at all: for instance, Albertus Magnus says, that Aristotle wrote an express treatise on the direction of the loadstone; but nobody ever saw that treatise, nor was it ever heard of by any of the rest of his commentators. We have in our hands some of the best performances of antiquity, in regard to geography; and any man who has eyes, and is at all acquainted with that science, can very easily discern, how far they fall short of maps that were made even an hundred years ago. The celebrated Vossius, and the rest of the admirers of the Chinese, who, by the way, derived all their knowledge from hearsay, may testify, in as strong terms as they think fit, their contempt for the western sages, and their high opinion of those in the east; but till they prove to us that their favourite Chinese made any voyages comparable to the Europeans, before the discovery of a passage to China by the Cape of Good Hope, they will excuse us from believing them. Besides, if the ancients had all this knowledge, how came it not to display itself in their performances?

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How came they to make such difficulties of what are now esteemed trifles? And how came they never to make any voyages, by choice at least, that were out of sight of land? Again, with respect to the Chinese, if they excel us so much in knowledge, how came the missionaries to be so much admired for their superior skill in the sciences? But to cut the matter short, we are not disputing now about speculative points of science, but as to the practical application of it; in which, I think, there is no doubt that the modern inhabitants of the western parts of the world excel, and excel chiefly from the labours and discoveries of these great and ingenious men, who applied their abilities to the improvement of useful arts, for the particular benefit of their countrymen, and to the common good of mankind; which character is not derived from any prejudice of ours, either against the ancients, or the oriental nations; but is founded in facts of public notoriety, and on general experience, which are a kind of evidence not to be controverted or contradicted.

We are still, however, in several respects short of perfection; and there are many things left to exercise the sagacity, penetration, and application of this, and of succeeding ages: for instance, the passages to the north-east and north-west are yet unknown; there is a great part of the southern continent undiscovered; we are, in a manner, ignorant of what lies between America and Japan, and all beyond that country lies buried in obscurity, perhaps in greater obscurity than it was an age ago; so that there is still room for performing great things, which, in their consequences, perhaps, might prove greater than can well be imagined. I say nothing of the discoveries that yet remain, with regard to inland countries, because these fall properly under another head, I mean that of Travels. But it will be time enough to think of penetrating into the heart of countries, when we have discovered the sea-coasts of the whole globe, towards which the voyages recorded in this chapter have so far advanced already. But the only means to arrive at these great ends, and to transmit to posterity a fame approaching, at least in some measure, to that of our ancestors, is to revive and restore that glorious spirit which led them to such great exploits; and the most natural method of doing this, is to collect and preserve the memory of their exploits, that they may serve at once to excite our imitation, encourage our endeavours, and point out to us how they may be best employed, and with the greatest probability of success.

# AN ACCOUNT OF NEW HOLLAND AND THE ADJACENT ISLANDS.

BY CAPTAIN WILLIAM DAMPIER.\*

**H**AVING described his voyage from Brazil to New Holland, this celebrated navigator thus proceeds :

About the latitude of  $26^{\circ}$  south we saw an opening, and ran in, hoping to find a harbour there ; but when we came to its mouth, which was about two leagues wide, we saw rocks and foul ground within, and therefore stood out again ; there we had twenty fathom water within two miles of the shore : the land every where appeared pretty low, flat and even, but with steep cliffs to the sea, and when we came near it there were no trees, shrubs, or grass to be seen. The soundings in the latitude of  $26^{\circ}$  south, from about eight or nine leagues off till you come within a league of the shore, are generally about forty fathoms, differing but little, seldom above three or four fathoms ; but the lead brings up very different sorts of sand, some coarse, some fine, and of several colours, as yellow, white, grey, brown, blueish and reddish.

When I saw there was no harbour here, nor good anchoring, I stood off to sea again in the evening of the 2d of August, fearing a storm on a lee-shore, in a place where there was no shelter, and desiring at least to have sea-room, for the clouds began to grow thick in the western-board, and the wind was already there, and began to blow fresh almost upon the shore, which at this place lies along north north-west and south south-east. By nine o'clock at night we got a pretty good offing ; but the wind still increasing, I took in my main top-sail, being able to carry no more sail than two courses and the mizzen. At two in the morning, August 3d, it blew very hard, and the sea was much raised, so that I furled all my sails but my main-sail, though the wind blew so hard, we had pretty clear weather till noon ; but then the whole sky was blackened with thick clouds, and we had some rain, which would last a quarter of an hour at a time, and then it would blow very fierce while the squalls of rain were over our heads, but as soon as they were gone the wind was by much abated, the stress of the storm being over : we sounded several times, but had no ground till eight o'clock, August the 4th, in the evening, and then had sixty fathom water, coral-ground. At ten we had fifty-six fathom fine sand. At twelve we had fifty-five fathom fine sand, of a pale blueish colour. It was now pretty moderate weather, yet I made no sail till morning, but then the wind veering about to the south-west, I made sail and stood to the north, and at eleven o'clock the next day, August 5th, we saw land again, at about ten leagues distant. This noon we were in latitude  $25^{\circ} 30'$ , and in the afternoon our cook died, an old man, who had been sick a great while, being infirm before we came out of England.

\* Dampier's Voyages, iii. 82. edit. 1729.

The 6th of August, in the morning, we saw an opening in the land, and we ran into it, and anchored in seven and a half fathom water, two miles from the shore, clean sand. It was somewhat difficult getting in here, by reason of many shoals we met with : but I sent my boat sounding before me. The mouth of this sound, which I called Shark's Bay, lies in about  $25^{\circ}$  south latitude, and our reckoning made its longitude from the Cape of Good Hope to be about  $87^{\circ}$ , which is less by one hundred and ninety-five leagues than is usually laid down in our common draughts, if our reckoning was right, and our glasses did not deceive us. As soon as I came to anchor in this bay, I sent my boat ashore to seek for fresh water ; but in the evening my men returned, having found none. The next morning I went ashore myself, carrying pick-axes and shovels with me, to dig for water, and axes to cut wood. We tried in several places for water, but finding none after several trials, nor in several miles compass, we left any farther search for it, and spending the rest of the day in cutting wood, we went aboard at night.

The land is of an indifferent height, so that it may be seen nine or ten leagues off. It appears at a distance very even ; but as you come nigher you find there are many gentle risings, though none steep or high. It is all a steep shore against the open sea ; but in this bay or sound we were now in, the land is low by the sea-side, rising gradually in with the land. The mould is sand by the sea-side, producing a large sort of sampier, which bears a white flower. Farther in, the mould is reddish, a sort of sand producing some grass, plants, and shrubs. The grass grows in great tufts, as big as a bushel, here and there a tuft ; being intermixed with much heath, much of the kind we have growing on our commons in England. Of trees or shrubs here are divers sorts ; but none above ten feet high : their bodies about three feet about, and five or six feet high before you come to the branches, which are bushy and composed of small twigs there spreading abroad, though thick set, and full of leaves, which were mostly long and narrow : the colour of the leaves was on one side whitish, and on the other green ; and the bark of the trees was generally of the same colour with the leaves, of a pale green. Some of these trees were sweet-scented, and reddish within the bark, like saffras, but redder. Most of the trees and shrubs had at this time either blossoms or berries on them. The blossoms of the different sorts of trees were of several colours, as red, white, yellow, &c. but mostly blue ; and these generally smelt very sweet and fragrant, as did some also of the rest : there were also beside some plants, herbs, and tall flowers, some very small flowers growing on the ground, that were sweet and beautiful, and for the most part unlike any I had seen elsewhere.

There were but few land fowls ; we saw none but eagles, of the larger sorts of birds ; but five or six sorts of small birds : the biggest sort of these were not bigger than larks, some no bigger than wrens, all singing with great variety of fine shrill notes ; and we saw some of their nests with young ones in them. The water-fowls are ducks (which had young ones now, this being the beginning of the spring in these parts), curlews, galdens, crab-catchers, cormorants, gulls, pelicans, and some water-fowl, such as I have not seen any where besides.

The land animals that we saw here were only a sort of raccoons, different from those of the West-Indies, chiefly as to their legs, for these have very short fore legs, but go jumping upon them as the others do (and like them are very good meat), and a sort of guanos, of the same shape and size with other guanos described, but differing from them in three remarkable particulars ; for these had a larger and uglier head, and had no tail, and at the rump, instead of the tail there, they had a stump of a tail, which appeared like another head, but not really such, being without mouth or eyes ;

yet this creature seemed by this means to have a head at each end, and, which may be reckoned a fourth difference, the legs also seemed all four of them to be fore-legs, being all alike in shape and length, and seeming by the joints and bending to be made as if they were to go indifferently either head or tail foremost; they were speckled black and yellow like toads, and had scales or knobs on their backs like those of crocodiles, plated on to the skin, or stuck into it, as part of the skin: they are very slow in motion; and when a man comes nigh them they will stand still and hiss, not endeavouring to get away: their livers are also spotted black and yellow; and the body, when opened, hath a very unfavoury smell. I did never see such ugly creatures any where but here. The guanos I have observed to be very good meat, and I have often eaten of them with pleasure; but though I have eaten of snakes, crocodiles and alligators, and many creatures that look frightfully enough, and there are but few I should have been afraid to eat of, if pressed by hunger, yet I think my stomach would scarce have served to venture upon the New Holland guanos, both the looks and the smell of them being so offensive.

The sea-fish that we saw here (for here was no river, land or pond of fresh water to be seen), are chiefly sharks: there are abundance of them in this particular sound, that I therefore gave it the name of Shark's Bay. Here are also ikates, thornbacks, and other fish of the ray kind (one sort especially like the sea-devil), and gar-fish, bonetas, &c. Of shell-fish we got here muscles, periwinkles, limpets, oysters, both of the pearl kind and also eating oysters, as well the common sort as long oysters, beside cockles, &c. The shore was lined thick with many other sorts of very strange and beautiful shells for variety of colour and shape, most finely spotted with red, black or yellow, &c. such as I have not seen any where but at this place. I brought away a great many of them, but lost all except a very few, and those not of the best.

There are also some green turtle weighing about two hundred pounds. Of these we caught two, which the water ebbing had left behind a ledge of rock, which they could not creep over. These served all my company two days, and they were indifferent sweet meat. Of the sharks we caught a great many, which our men eat very favourily. Among them we caught one which was eleven feet long. The space between its two eyes was twenty inches, and eighteen inches from one corner of his mouth to the other. Its maw was like a leather sack, very thick, and so tough that a sharp knife could scarce cut it, in which we found the head and bones of a hippopotomus, the hairy lips of which were still found and not putrified, and the jaw was also firm, out of which we plucked a great many teeth, two of them eight inches long, and as big as a man's thumb, small at one end, and a little crooked, the rest not above half so long. The maw was full of jelly, which stank extremely: however I saved for a while the teeth and the shark's jaw; the flesh of it was divided among my men, and they took care that no waste should be made of it.

It was the 7th of August when we came into Shark's-Bay, in which we anchored at three several places, and staid at the first of them (on the west side of the bay) till the 11th; during which time we searched about, as I said, for fresh water, digging wells, but to no purpose; however, we cut good store of fire-wood at this first anchoring-place, and my company were all here very well refreshed with raccoons, turtle, shark, and other fish, and some fowls, so that we were now all much brisker than when we came in hither; yet still I was for standing farther into the bay, partly because I had a mind to increase my stock of fresh water, which was began to be low, and partly for the sake of discovering this part of the coast. I was invited to go further, by seeing from this anchoring place all open before me, which therefore I designed to search

search before I left the bay : so on the 11th, about noon, I steered farther in, with an easy sail, because we had but shallow water ; we kept therefore good looking out for fear of shoals, sometimes shortening, sometimes deepening the water. About two in the afternoon we saw the land a-head that makes the south of the bay, and before night we had again sholdings from that shore, and therefore shortened sail and stood off and on all night under two topails, continually founding, having never more than ten fathom, and seldom less than seven. The water deepened and sholdned so very gently, that in heaving the lead five or six times we should scarce have a foot difference. When we came into seven fathom either way, we presently went about. From this south part of the bay we could not see the land from whence we came in the afternoon ; and this land we found to be an island of three or four leagues long, but it appearing barren, I did not strive to go nearer it, and the rather because the winds would not permit us to do it without much trouble, and at the openings the water was generally shoal : I therefore made no farther attempts in this south-west and south part of the bay, but steered away to the eastward, to see if there was any land that way, for as yet we had seen none here. On the 12th, in the morning, we passed by the north point of that land, and were confirmed in the persuasion of its being an island, by seeing an opening to the east of it, as we had done on the west. Having fair weather, a small gale and smooth water, we stood further on in the bay, to see what land was on the east of it. Our soundings at first were seven fathom, which held so a great while, but at length it decreased to six. Then we saw the land right a-head. We could not come near it with the ship, having but shoal water, and it being dangerous lying there, and the land extraordinary low, very unlikely to have fresh water (though it had a few trees on it, seemingly mangroves), and much of it probably covered at highwater, I stood out again that afternoon, deepening the water, and before night anchored in eight fathom, clean white sand, about the middle of the bay. The next day we got up our anchor, and that afternoon came to an anchor once more near two islands and a shoal of coral rocks that face the bay. Here I scrubbed my ship ; and finding it very improbable I should get any further here, I made the best of my way out to sea again, founding all the way, but finding, by the shallowness of the water, that there was no going out to sea to the east of the two islands that face the bay, nor between them, I returned to the west entrance, going out by the same way I came in at, only on the east instead of the west side of the small shoal : in which channel we had ten, twelve, and thirteen fathom water, still deepening upon us till we were out at sea. The day before we came out I sent a boat a-shore to the most northerly of the two islands, which is the least of them, catching many small fish in the mean while with hook and line : the boat's crew returning, told me that the isle produces nothing but a sort of green, short, hard prickly grafs, affording neither wood nor fresh water, and that a sea broke between the two islands, a sign that the water was shallow. They saw a large turtle, and many skates and thornbacks, but caught none.

It was August the 14th when I sailed out of this bay or sound, the mouth of which lies, as I said, in  $25^{\circ} 5'$ , designing to coast along to the north-east till I might commodiously put in at some other port of New Holland. In passing out we saw three water-serpents swimming about in the sea, of a yellow colour, spotted with dark brown spots ; they were each about four foot long, and about the bigness of a man's wrist, and were the first I saw on this coast, which abounds with several sorts of them ; we had the winds at our first coming out at north, and the land lying north-easterly ; we plied off and on, getting forward but little till the next day, when the wind coming at south-south-west and south, we began to coast it along the shore on the northward, keeping



at six or seven leagues off shore, and sounding often, we had between forty and forty-six fathom water, brown sand, with some white shells. This 15th of August we were in latitude  $24^{\circ} 41'$ . On the 16th day, at noon, we were in  $23^{\circ} 22'$ . The wind coming at east by north, we could not keep the shore aboard, but were forced to go farther off, and lost sight of the land; then sounding we had no ground with eighty fathom line; however the wind shortly after came about again to the southward, and then we jogged on again to the northward, and saw many small dolphins and whales, and abundance of scuttle-shells swimming on the sea, and some water-snakes every day. The 17th we saw the land again, and took a sight of it.

The 18th, in the afternoon, being three or four leagues off shore, I saw a shoal-point stretching from the land into the sea, a league or more; the sea broke high on it, by which I saw plainly there was a shoal there. I stood farther off, and coasted along shore, to about seven or eight leagues distance; and at twelve o'clock at night we sounded, and had but twenty fathom hard sand. By this I found I was upon another shoal, and so presently steered of west half an hour, and had then forty fathom. At one in the morning of the 18th day we had eighty-five fathom; by two we could find no ground, and then I ventured to steer along shore again due north, which is two points wide of the coast (that lies north-north-east) for fear of another shoal. I would not be too far off from the land, being desirous to search into it wherever I should find an opening or any convenience of searching about for water, &c. When we were off the shoal-point I mentioned where we had but twenty fathom water, we had in the night abundance of whales about the ship, some a-head, others a-stern, and some on each side blowing and making a very dismal noise, but when we came out again into deeper water they left us; indeed, the noise that they made by blowing and dashing of the sea with their tails, making it all of a breach and foam, was very dreadful to us, like the breach of the waves in very shoal-water, or among rocks. The shoal these whales were upon had depth of water sufficient, no less than twenty fathom, as I said, and it lies in latitude  $22^{\circ} 22'$ . The shore was generally bold all along; we had met with no shoal at sea since the Abroholo-shoal, when we first fell on the New Holland coast in the latitude of twenty-eight, till yesterday in the afternoon, and this night. This morning also, when we expected by the draught we had with us to have been eleven leagues off shore, we were but four, so that either our draughts were faulty, which yet hitherto and afterwards we found true enough as to the lying of the coast, or else here was a tide unknown to us that deceived us, though we had found very little of any tide on this coast hitherto; as to our winds in the coasting thus far, as we had been within the verge of the general trade (though interrupted by the storm I mentioned), from the latitude of 28, when we first fell in with the coast, and by that time we were in the latitude of 25, we had usually the regular trade wind (which is here south-south-east), when we were at any distance from shore; but we had often sea and land breezes, especially when near shore, and when in Shark's-Bay, and had a particular north-west wind or storm that set us in thither. On this 18th of August we coasted with a brisk gale of the true trade wind at south-south-east, very fair and clear weather; but hauling off in the evening to sea, were next morning out of sight of land; and the land now trending away north-easterly, and we being to the northward of it, and the wind also shrinking from the south-south-east to the east-south-east (that is, from the true trade-wind to the sea-breeze, as the land now lay), we could not get in with the land again yet-awhile, so as to see it, though we trimmed sharp and kept close on a wind. We were this 19th day in latitude  $21^{\circ} 42'$ . The 20th we were in latitude  $19^{\circ} 37'$ , and kept close on a wind to get sight of the land again, but could

not yet see it. We had very fair weather; and though we were so far from the land as to be out of sight of it, yet we had the sea and land breezes. In the night we had the land-breeze at south-south-east a small gentle gale, which in the morning about sun-rising would shift about gradually (and withal increasing in strength) till about noon, we should have it at east-south-east, which is the true sea-breeze here; then it would blow a brisk gale, so that we could scarce carry our top-sails double reefed; and it would continue thus till three in the afternoon, when it would decrease again. The weather was fair all the while, not a cloud to be seen, but very hazy, especially nigh the horizon. We sounded several times this 20th day, and at first had no ground, but had afterwards from fifty-two to forty-five fathom, coarse brown sand, mixt with small brown and white stones, with dints besides in the tallow.

The 21st day also we had small land-breezes in the night, and sea-breezes in the day; and as we saw some sea-snakes every day, so this day we saw a great many, of two different sorts or shapes; one sort was yellow, and about the bigness of a man's wrist, about four feet long, having a flat tail about four fingers broad; the other sort was much smaller and shorter, round and spotted black and yellow: this day we sounded several times, and had forty-five fathom sand; we did not make the land till noon, and then saw it first from our topmast-head; it bore south-east by east about nine leagues distance, and it appeared like a cape or head of land; the sea-breeze this day was not so strong as the day before, and it veered out more, so that we had a fair wind to run in with to the shore, and at sun-set anchored in twenty fathom, clean sand, about five leagues from the Bluff-point, which was not a cape (as it appeared at a great distance), but the easternmost end of an island, about five or six leagues in length, and one in breadth. There were three or four rocky islands about a league from us between us and the bluff point; and we saw many other islands both to the east and west of it, as far as we could see either way from our top-mast-head; and all within them to the south there was nothing but islands of a pretty height, that may be seen eight or nine leagues off; by what we saw of them they must have been a range of islands of about twenty leagues in length, stretching from east-north-east to west-south-west and for ought I know, as far as to those of Shark's-Bay, and to a considerable breadth also, for we could see nine or ten leagues in among them) towards the continent or main land of New Holland, if there be any such thing hereabouts; and by the great tides I met with a while afterwards, more to the north-east, I had a strong suspicion that here might be a kind of archipelago of islands, and a passage possibly to the south of New Holland and New Guinea into the great South Sea eastward, which I had thoughts also of attempting in my return from New Guinea, had circumstances permitted, and told my officers so; but I would not attempt it at this time, because we wanted water, and could not depend upon finding it there. This place is in the latitude of  $20^{\circ} 21'$ , but in the draught that I had of this coast, which was Tasman's, it was laid down in  $19^{\circ} 50'$ , and the shore is laid down as all along joining in one body or continent, with some openings appearing like rivers, and not like islands, as really they are. This place lies more northerly by  $40'$  than is laid down in Mr. Tasman's draught; and beside its being made a firm continued land, only with some openings like the mouths of rivers, I found the soundings also different from what the pricked line of his course shews them, and generally shallower than he makes them; which inclines me to think that he came not so near the shore as his line shews, and so had deeper soundings, and could not so well distinguish the islands; his meridian or difference of longitude from Shark's-Bay,

Bay, agrees well enough with my account, which is two hundred and thirty two leagues, though we differ in latitude; and to confirm my conjecture that the line of his course is made too near the shore, at least not far to the east of this place, the water is there so shallow that he could not come there so nigh.

But to proceed; in the night we had a small land-breeze, and in the morning I weighed anchor, designing to run in among the islands, for they had large channels between them, of a league wide at least, and some two or three leagues wide; I sent in my boat before to sound, and if they found shoal-water to return again, but if they found water enough, to go ashore on one of the islands, and stay till the ship came in, where they might in the mean time search for water; so we followed after with the ship, sounding as we went in, and had twenty fathom, till within two leagues of the Bluff-head, and then we had shoal water, and very uncertain soundings; yet we ran in still with an easy sail, sounding and looking out well, for this was dangerous work. When we came abreast of the Bluff-head, and about two miles from it, we had but seven fathom; then we edged away from it, but had no more water, and running in a little farther, we had but four fathoms, so we anchored immediately; and yet when we had veered out a third of a cable we had seven fathom water again, so uncertain was the water. My boat came immediately on board, and told me that the island was very rocky and dry, and they had little hopes of finding water there: I sent them to sound, and bade them, if they found a channel of eight or ten fathom water, to keep on, and we would follow with the ship. We were now about four leagues within the outer small rocky islands, but still could see nothing but islands within us, some five or six leagues long, others not above a mile round. The large islands were pretty high; but all appeared dry, and mostly rocky and barren. The rocks looked of a rusty yellow colour, and therefore I despaired of getting water on any of them; but was in some hopes of finding a channel to run in beyond all these islands, could I have spent time here, and either got to the main of New Holland, or find out some other islands that might afford us water and other refreshments; besides, that among so many islands, we might have found some sort of rich mineral, or ambergrease, it being a good latitude for both these. But we had not sailed above a league farther before our water grew shoaler again, and then we anchored in six fathom hard sand.

We were now on the inner side of the island, on whose outside is the Bluff-point. We rode a league from the island, and I presently went ashore, and carried shovels to dig for water, but found none. There grow here two or three sorts of shrubs, one just like rosemary, and therefore I called this Rosemary Island; it grew in great plenty here, but had no smell; some of the other shrubs had blue and yellow flowers; and we found two sorts of grain like beans; the one grew on bushes, the other on a sort of a creeping vine that runs along on the ground, having very thick broad leaves, and the blossom like a bean blossom, but much larger, and of a deep red colour, looking very beautiful. We saw here some cormorants, gulls, crabcatchers, &c. a few small land-birds, and a sort of white parrots, which flew a great many together. We found some shell-fish, viz. limpets, perriwinkles, and abundance of small oysters growing on the rocks, which were very sweet. In the sea we saw some green turtle, many sharks, and abundance of water-snakes of several sorts and sizes. The stones were all of rusty colour, and ponderous.

We saw a smoak on an island three or four leagues off; and here also the bushes had been burned, but we found no other sign of inhabitants. It was probable, that on the island where the smoak was there were inhabitants, and fresh water for them.

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In the evening I went aboard, and consulted with my officers whether it was best to send thither, or to search among any other of these islands with my boat, or else go from hence, and coast along shore with the ship, till we could find some better place than this was to ride in, where we had shoal water, and lay exposed to winds and tides. They all agreed to go from hence; so I gave orders to weigh in the morning as soon as it should be light, and to get out with the land-breeze.

Accordingly, August the 23d, at five in the morning we ran out, having a pretty fresh land-breeze at south-south-east. By eight o'clock we were got out, and very seasonably, for before nine the sea-breeze came on us very strong, and increasing, we took in our top-sails and stood off under two courses and a mizen, this being as much sail as we could carry. The sky was clear, there being not one cloud to be seen; but the horizon appeared very hazy, and the sun at setting the night before, and this morning at rising, appeared very red. The wind continued very strong till twelve, then it began to abate; I have seldom met with a stronger breeze. These strong sea-breezes lasted thus in their turns three or four days. They sprung up with the sun-rise; by nine o'clock they were very strong, and so continued till noon, when they began to abate; and by sun-set there was little wind, or a calm till the land-breezes came, which we should certainly have in the morning about one or two o'clock. The land-breezes were between the south-south-west and south-south-east: the sea-breezes between the east-north-east and north-north-east. In the night while calm, we fished with hook and line, and caught good store of fish, viz. snappers, breams, old-wives, and dog-fish. When these last came we seldom caught any others; for if they did not drive away the other fish, yet they would be sure to keep them from taking our hooks, for they would first have them themselves, biting very greedily. We caught also a monk-fish, of which I brought home the picture.

On the 25th of August, we still coasted along shore, that we might the better see any opening; kept sounding, and had about twenty fathom clean sand. The 26th day, being about four leagues off shore, the water began gradually to sholden from twenty to fourteen fathom. I was edging in a little towards the land, thinking to have anchored; but presently after the water decreased almost at once, till we had but five fathom. I durst therefore adventure no farther, but steered out the same way that we came in; and in a short time had ten fathom (being then about four leagues and a half from the shore) and even soundings. I steered away east-north-east, coasting along as the land lies. This day the sea-breezes began to be very moderate again, and we made the best of our way along shore, only in the night edging off a little for fear of shoals. Ever since we left Shark's Bay we had fair clear weather, and so for a great while still.

The 27th day, we had twenty fathom water all night, yet we could not see land till one in the afternoon from our topmast-head. By three we could just discern land from our quarter-deck; we had then sixteen fathom. The wind was at north, and we steered east-by-north, which is but one point in on the land; yet we decreased our water very fast: for at four we had but nine fathom; the next cast but seven, which frightened us; and we then tacked instantly and stood off; but in a short time the wind coming at north-west and west-north-west, we tacked again, and steered north-north-east, and then deepened our water again, and had all night from fifteen to twenty fathom.

The 28th day we had between twenty and forty fathom. We saw no land this day, but saw a great many snakes and some whales. We saw also some boobies, and noddy-birds; and in the night caught one of these last. It was of another shape and colour than any I had seen before. It had a small long bill, as all of them have, flat feet

feet like ducks feet, its tail forked like a swallow, but longer and broader, and the fork deeper than that of the swallow, with very long wings; the top or crown of the head of this noddy was coal-black, having also small black streaks round about and close to the eyes; and round these streaks on each side, a pretty broad white circle. The breast, belly, and under-part of the wings of this noddy were white; and the back and upper-part of its wings of a faint black or smoky colour. Noddies are seen in most places between the tropics, as well in the East Indies and on the coast of Brazil, as in the West Indies. They rest ashore at night, and therefore we never see them far at sea, not above twenty or thirty leagues, unless driven off in a storm. When they come about a ship they commonly perch in the night, and will sit still till they are taken by the seamen. They build on cliffs against the sea or rocks.

The 30th day, being in latitude  $18^{\circ} 21'$ , we made the land again, and saw many great smokes near the shore; and having fair weather and moderate breezes, I steered in towards it. At four in the afternoon I anchored in eight fathom water, clear sand, about three leagues and a half from the shore. I presently sent my boat to sound nearer in, and they found ten fathom about a mile farther in; and from thence still farther in the water decreased gradually to nine, eight, seven, and at two miles distance to six fathom. This evening we saw an eclipse of the moon, but it was abating before the moon appeared to us; for the horizon was very hazy, so that we could not see the moon till she had been half an hour above the horizon: and at two hours twenty-two minutes after sun-set, by the reckoning of our glasses, the eclipse was quite gone, which was not of many digits. The moon's centre was then  $33^{\circ} 40'$  high.

The 31st of August betimes in the morning I went ashore with ten or eleven men to search for water. We went armed with muskets and cutlasses for our defence, expecting to see people there; and carried also shovels and pickaxes to dig wells. When we came near the shore we saw three tall black naked men on the sandy bay a-head of us: but as we rowed in, they went away. When we were landed, I sent the boat with two men in her to lie a little from the shore at an anchor, to prevent being seized; while the rest of us went after the three black men, who were now got on the top of a small hill about a quarter of a mile from us, with eight or nine men more in their company. They seeing us coming, ran away. When we came on the top of the hill where they first stood we saw a plain savannah, about half a mile from us, farther in from the sea. There were several things like hay-cocks, standing in the savannah, which at a distance we thought were houses, looking just like the Hottentots' houses at the Cape of Good Hope: but we found them to be so many rocks. We searched about these for water, but could find none, nor any houses, nor people, for they were all gone. Then we turned again to the place where we landed, and there we dug for water.

While we were at work there came nine or ten of the natives to a small hill a little way from us, and stood there menacing and threatening of us, and making a great noise. At last one of them came towards us, and the rest followed at a distance. I went out to meet him, and came within fifty yards of him, making to him all the signs of peace and friendship I could; but then he ran away, neither would they any of them stay for us to come nigh them; for we tried two or three times. At last I took two men with me, and went in the afternoon along by the sea-side, purposely to catch one of them, if I could, of whom I might learn where they got their fresh water. There were ten or twelve of the natives a little way off, who seeing us three going away from the rest of our men, followed us at a distance. I thought they would follow us; but there being for a while a sand-bank between us and them, that they could not  
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then see us, we made a halt, and hid ourselves in a bending of the sand-bank. They knew we must be thereabouts, and being three or four times our numbers, thought to seize us. So they dispersed themselves, some going to the sea-shore, and others beating about the sand-hills. We knew by what rencounter we had had with them in the morning that we could easily out-run them; so a nimble young man that was with me seeing some of them near, ran towards them; and they for some time ran away before him; but he soon overtaking them, they faced about and fought him. He had a cutlass, and they had wooden lances; with which, being many of them, they were too hard for him. When he first ran towards them I chased two more that were by the shore; but fearing how it might be with my young man, I turned back quickly, and went up to the top of a sand-hill, whence I saw him near me, closely engaged with them. Upon their seeing me, one of them threw a lance at me, that narrowly missed me. I discharged my gun to scare them, but avoided shooting any of them; till finding the young man in great danger from them, and myself in some; and that though the gun had a little frightened them at first, yet they had soon learnt to despise it, tossing up their hands, and crying, "pooh, pooh, pooh;" and coming on afresh with a great noise, I thought it high time to charge again, and shoot one of them, which I did. The rest, seeing him fall, made a stand again; and my young man took the opportunity to disengage himself, and come off to me; my other man also was with me, who had done nothing all this while, having come out unarmed; and I returned back with my men, designing to attempt the natives no farther, being very sorry for what had happened already. They took up their wounded companion; and my young man, who had been struck through the cheek by one of their lances, was afraid it had been poisoned: but I did not think that likely. His wound was very painful to him, being made with a blunt weapon; but he soon recovered of it.

Among the New Hollanders, whom we were thus engaged with, there was one who by his appearance and carriage, as well in the morning as this afternoon, seemed to be the chief of them, and a kind of prince or captain among them. He was a young brisk man, not very tall, nor so personable as some of the rest, though more active and courageous: he was painted (which none of the rest were at all) with a circle of white paste or pigment (a sort of lime, as we thought) about his eyes, and a white streak down his nose, from his forehead to the tip of it: and his breast and some part of his arms were also made white with the same paint; not for beauty or ornament, one would think, but as some wild Indian warriors are said to do, he seemed thereby to design, the looking more terrible; this his painting adding very much to his natural deformity; for they all of them have the most unpleasant looks and the worst features of any people that ever I saw, though I have seen great variety of savages. These New Hollanders were probably the same sort of people as those I met with on this coast in my Voyage round the World; for the place I then touched at was not above forty or fifty leagues to the north-east of this; and these were much the same blinking creatures, (here being also abundance of the same kind of flesh-flies teasing them,) and with the same black skins, and hair frizzled, tall and thin, &c. as those were: but we had not the opportunity to see whether these, as the former, wanted two of their fore-teeth.

We saw a great many places where they had made fires, and where there were commonly three or four boughs stuck up to windward of them; for the wind (which is the sea-breeze) in the day-time blows always one way with them, and the land-breeze is but small. By their fire-places we should always find great heaps of fish-shells of several sorts; and it is probable that these poor creatures here lived chiefly on the shell-fish, as those I before described did on small-fish, which they caught in wires or holes



in the sand at low water. These gathered their shell-fish on the rocks at low water ; but had no wires (that we saw) whereby to get any other sorts of fish : as among the former I saw not any heaps of shells as here, though I know they also gathered some shell-fish. The lances also of those were such as these had ; however they being upon an island, with their women and children, and all in our power, they did not there use them against us, as here on the continent, where we saw none but some of the men under head, who come out purposely to observe us. We saw no houses at either place ; and I believe they have none, since the former people on the island had none, though they had all their families with them.

Upon returning to my men I saw that though they had dug eight or nine feet deep, yet found no water. So I returned aboard that evening, and the next day, being September 1st, I sent my boatswain ashore to dig deeper, and sent the sail with him to catch fish. While I staid aboard I observed the flowing of the tide, which runs very swift here, so that our nun-buoy would not bear above the water to be seen. It flows here (as on that part of New Holland I described formerly) about five fathom ; and here the flood runs south-east by south till the last quarter ; then it sets right in towards the shore (which lies here south-south-west and north-north-east) and the ebb runs north-west by north. When the tides slackened we fished with hook and line, as we had already done in several places on this coast ; on which in this voyage hitherto we had found but little tides ; but by the height, and strength, and course of them hereabouts, it should seem that if there be such a passage or streight going through eastward to the great South Sea, as I said one might suspect, one would expect to find the mouth of it somewhere between this place and Rosemary Island, which was the part of New Holland I came last from.

Next morning my men came aboard and brought a rundlet of brackish water which they got out of another well that they dug in a place a mile off, and about half as far from the shore ; but this water was not fit to drink. However we all concluded that it would serve to boil our oatmeal, for burgoo, whereby we might save the remains of our other water for drinking, till we should get more ; and accordingly the next day we brought aboard four hogheads of it : but while we were at work about the well we were sadly pestered with the flies, which were more troublesome to us than the sun, though it shone clear and strong upon us all the while very hot. All this while we saw no more of the natives, but saw some of the smoaks of some of their fires at two or three miles distance.

The land hereabouts was much like the port of New Holland that I formerly described ; it is low, but seemingly barricadoed with a long chain of sand-hills to the sea, that lets nothing be seen of what is farther within land. At high water the tides rising so high as they do, the coast shews very low ; but when it is low water it seems to be of an indifferent height. At low water-mark the shore is all rocky, so that then there is no landing with a boat ; but at high water a boat may come in over those rocks to the sandy bay, which runs all along on this coast. The land by the sea for about five or six hundred yards is a dry sandy soil, bearing only shrubs and bushes of divers sorts. Some of these had them at this time of the year, yellow flowers or blossoms, some blue, and some white ; most of them of a very fragrant smell. Some had fruit like peascods, in each of which there were just ten small peas ; I opened many of them, and found no more nor less. There are also here some of that sort of bean which I saw at Rosemary Island : and another sort of small red hard pulse, growing in cods also, with little black eyes like beans. I know not their names, but have seen them used often in the East Indies for weighing gold ; and they make the same use of them at Guinea, as I have heard, where the women also make bracelets with them to wear about their arms.

These



These grow on bushes ; but here are also a fruit like beans growing on a creeping sort of shrub-like vine. There was great plenty of all these sorts of ~~cod~~-fruit growing on the sand-hills by the sea-side, some of them green, some ripe, and some fallen on the ground : but I could not perceive that any of them had been gathered by the natives ; and might not probably be wholesome food.

The land farther in, that is, lower than what borders on the sea, was so much as we saw of it, very plain and even ; partly savannahs and partly woodland. The savannahs bear a sort of thin coarse grass. The mould is also a coarser sand than that by the sea-side, and in some places it is clay. Here are a great many rocks in the large savannah we were in, which are five or six feet high, and round at top like a hay-cock, very remarkable ; some red and some white. The woodland lies farther in still, where there were divers sorts of small trees, scarce any three feet in circumference, their bodies twelve or fourteen feet high, with a head of small knibs or boughs. By the sides of the creeks, especially nigh the sea, there grow a few small black mangrove-trees.

There are but few land-animals. I saw some lizards ; and my men saw two or three beasts like hungry wolves, lean like so many skeletons, being nothing but skin and bones ; it is probable that it was the foot of one of those beasts that I mentioned as seen by us in New Holland. We saw a raccoon or two, and one small speckled snake.

The land-fowls that we saw here were crows, just such as ours in England, small hawks and kites ; a few of each sort : but here are plenty of small turtle-doves, that are plump, fat, and very good meat. Here are two or three sorts of smaller birds, some as big as larks, some less ; but not many of either sort. The sea-fowl are pelicans, boobies, noddies, curlews, sea-pies, &c. and but few of these neither.

The sea is plentifully stocked with the largest whales that I ever saw ; but not to compare with the vast ones of the Northern Seas. We saw also a great many green turtle, but caught none, here being no place to set a turtle-net in ; there being no channel for them, and the tides running so strong. We saw some sharks and parra-coots ; and with hooks and lines we caught some rock-fish and old-wives. Of shell-fish, here were oysters both of the common kind for eating, and of the pearl kind ; and also wilks, conchs, muscles, limpets, perriwinkles, &c. and I gathered a few strange shells, chiefly a sort not large, and thick-set all about with rays or spikes growing in rows.

And thus having ranged about a considerable time upon this coast, without finding any good fresh water, or any convenient place to clean the ship, as I had hoped for ; and it being moreover the height of the dry season, and my men growing scorbutic for want of refreshments, so that I had little encouragement to search further, I resolved to leave this coast, and accordingly in the beginning of September set sail towards Timor.

On the 12th of December 1699, we sailed from Babao, coasting along the island Timor to the eastward, towards New Guinea. It was the 20th before we got as far as Laphao, which is but forty leagues. We saw black clouds in the north-west, and expected the wind from that quarter above a month sooner.

That afternoon we saw the opening between the islands Omba and Fetter, but feared to pass through in the night. At two o'clock in the morning it fell calm, and continued so till noon, in which time we drove with the current back again south-west six or seven leagues.

On the 22d, steering to the eastward to get through between Omba and Fetter, we met a very strong tide against us, so that although we had a very fresh gale, we yet  
made

made way very slowly, but before night got through. By a good observation we found that the ~~island of~~ Omba lies in latitude  $8^{\circ} 25'$ . In my drafts it is laid down in ~~the~~ course from Sabao, is east,  $25^{\circ}$  north, distance one hundred eighty leagues. We founded several times when near Omba, but had no ground. On the ~~21st~~ ~~22nd~~ of Omba we saw four or five men, and a little further three pretty houses, but did not go ashore.

At five this ~~morning~~ we met a tornado, which yielded much rain, thunder, and lightning; yet we had but little wind. The 24th in the morning we caught a large shark, which gave all the ship's company a plentiful meal.

The 27th we saw the Burning Island; it lies in latitude  $6^{\circ} 36'$  south; it is high, and but small; it runs from the sea a little sloping towards the top, which is divided in the middle into two peaks, between which issued out much smoak: I have not seen more from any volcano. I saw no trees, but the north side appeared green, and the rest looked very barren.

Having passed the Burning Island, I shaped my course for two islands, called Turtle Isles, which lie north-east-by-east a little easterly, and distant about fifty leagues from the Burning Isle: I fearing the wind might veer to the eastward of the north, steered twenty leagues north-east, then north-east-by-east. On the 28th we saw two small low islands, called Lucca-parros, to the north of us. At noon I accounted myself twenty leagues short of the Turtle Isles.

The next morning, being in the latitude of the Turtle Islands, we looked out sharp for them, but saw no appearance of any island till eleven o'clock, when we saw an island at a great distance. At first we supposed it might be one of the Turtle Isles: but it was not laid down true, neither in latitude nor longitude from the Burning Isle, nor from the Luca-parros, which last I took to be a great help to guide me, they being laid down very well from the Burning Isle, and that likewise in true latitude and distance from Omba, so that I could not tell what to think of the island now in sight, we having had fair weather, so that we could not pass by the Turtle Isles without seeing them, and this in sight was much too far off for them. We found variation  $1^{\circ} 2'$  east. In the afternoon I steered north-east-by-east for the islands that we saw. At two o'clock I went and looked over the fore-yard, and saw two islands at much greater distance than the Turtle Islands are laid down in my drafts, one of them was a very high peaked mountain, cleft at top, and much like the Burning Island that we passed by, but bigger and higher; the other was a pretty long high flat island. Now I was certain if these were not the Turtle Islands, and that they could be no other than the Bande Isles, yet we steered in to make them plainer. At three o'clock we discovered another small flat island to the north-west of the others, and saw a great deal of smoak rise from the top of the high island. At four we saw other small islands, by which I was now assured that these were the Bande Isles there. At five I altered my course and steered east, and at eight, east-south-east, because I would not be seen by the inhabitants of those islands in the morning. We had little wind all night; and in the morning, as soon as it was light, we saw another high peaked island: at eight it bore south-south-east half-east, distance eight leagues: and this I knew to be Bird Isle. It is laid down in our drafts in latitude  $5^{\circ} 9'$  south, which is too far southerly by twenty-seven miles, according to our observation; and the like error in laying down the Turtle Islands might at the occasion of our missing them.

At night I shortened sail, for fear of coming too nigh some islands, that stretch bending like a half moon from Ceram towards Timor, and which in my course must of necessity pass through. The next morning betimes I saw them, and found them

them to be at a farther distance from Bird Island than I thought. In the afternoon it fell quite calm, and when we saw a little wind, we began flying from one point to another, that I could not without difficulty find the islands where I designed; besides, I found a current setting to the southward, that it was betwixt five and six in the evening before I sailed. I sailed to the southward, and then just weathered little Watela, whereas I thought to have been to the northward leagues more northerly. We saw the day before, betwixt two and three, a spout at a small distance from us; it fell down out of a black cloud, that yielded great store of rain, thunder and lightning: this cloud hovered to the southward of us for the space of three hours, and then drew to the westward a great pace, at which time it was that we saw the spout, which hung fast to the cloud till it broke, and then the cloud whirled about to the south-east, then to east-north-east, where meeting with an island, it spent itself and so dispersed, and immediately we had a little of the tail of it, having had none before. Afterward we saw a smook on the island Kosiway, which continued till night.

On new-year's day we first descried the land of New-Guinea, which appeared to be high land; and the next day we saw several high islands on the coast of New Guinea, and ran in with the main land. The shore here lies along east-south-east and west-north-west. It is high even land, very well clothed with tall flourishing trees, which appeared very green, and gave us a very pleasant prospect. We ran to the westward of four mountainous islands; and in the night had a small tornado, which brought with it some rain and a fair wind. We had fair weather for a long time, only when near any land we had some tornadoes; but off, at sea, commonly clear weather; though, if in sight of land, we usually saw many black clouds hovering about it.

On the 5th and 6th of January, we plied to get in with the land, designing to anchor, fill water, and spend a little time in searching the country, till after the change of the moon, for I found a strong current setting against us. We anchored in thirty-eight fathom water, good dozy ground. We had an island of a league long without us, about three miles distant, and we rode from the main about a mile. The easternmost point of land seen, bore east-by-south half-south, distance three leagues; and the westernmost, west-south-west half-south, distance two leagues. So soon as we anchored, we sent the pinnace to look for water, and try if they could catch any fish. Afterwards we sent the yawl another way to see for water. Before night the pinnace brought on board several sorts of fruits, that they found in the woods, such as I never saw before. One of my men killed a stately land-fowl, as big as the largest dunghill cock; it was of a sky-colour, only in the middle of the wings was a white spot, above which were some reddish spots; on the crown it had a large bunch of long feathers, which appeared very pretty; his bill was like a pigeon's: he had strong legs, and feet, like dunghill-fowls, only the claws were reddish, his crop was full of berries. It lays an egg as big as a large hen's egg, for our men climbed the trees where it nested, and brought off one egg. They found water, and reported that the trees were large, tall and very thick, and that they saw no sign of people. At the yawl came aboard, and brought a wooden fish-gig, very ingeniously made, the matter of it was a small cane; they found it by a small barbecue, where they also saw a shattered canoe.

The next morning I sent the boatwain ashore a fishing, and at one haul he caught three hundred and fifty-two mackarels, and about twenty other fishes, which I caused to be equally divided among all my company. I sent also the runner and chief mate,

## MPHER'S ACCOUNT OF NEW HOLLAND.

could find convenient anchoring near a watering-place; by which they had found a fine stream of good water, where they could fill, and it was very easy to be filled, and that the ship might be pleased; so I went thither. The next morning, therefore, we went to the fathom water, soft oozy ground, about a mile from the shore, and there we took three tun of water that night, and caught two or three pike-perch, a parracota, but with a longer snout, something resembling a mullet. The next day I sent the boat again for water, and before it was full.

But after fifteen tuns of water, seeing we could catch but little fish, and that the ship was low, I intended to sail next day, but finding that we wanted wood, going ashore to hasten it, at some distance from the place where we were, a small cove, where I saw two barbecues, which appeared not to be made of iron; the spars were cut with some sharp instrument, so that it seems that they have iron. On the 10th, a little after twelve we sailed and stood over to the north-side of the bay, and at one o'clock we arrived at north and north-north-west. At four we passed out by a point named from its many white cliffs, having no name in our language long, pretty high, and very woody: it is about five leagues long, and at the west end it reaches within three miles of it. At some point west point appears like a cape-land; the north side trends away to the east side east-south-east. This island lies in latitude  $3^{\circ} 4'$  distance from Babao, five hundred and twelve miles east. After we sailed to get to the northward, but met with such a strong current, we got but little; for if the wind favoured us in the night, that night we lost it again, and were driven as far astern next morning as several days.

At a point of land that we had been three days getting about, we went, so that having the wind at north-west-by-west and west-north-west, we went to the northward, and had several soundings: at three o'clock the nearest part of New Guinea being about three leagues distance: five, thirty-six; at six, thirty-six; at eight, thirty-three fathom; at four leagues distant so that as we ran off, we found our water deep, and some islands to the westward of us, at about four leagues distance.

We saw smoaks on the islands to the west of us, and having a fine breeze, we went away for them: at seven o'clock in the evening we anchored about two leagues from an island, good soft oozy ground. We saw fires ashore. In the morning we weighed again, and ran to the northward, but have shallower water, but we ran within a mile of the shore, and there we had eight fathom good soft holding ground: while we were under way, they spoke to us, but we did not understand their language; we waved to them to come aboard, and I called to them in their language to do the same, but they would not, yet they came so near that we shewed them such things as we had to truck with them, yet neither of them came on board, but they made signs for us to come ashore, so I went after them in my pinnace, carrying with me knives, &c.; when we came near the shore, I called to them in their language, but but two men at first, the rest lying in ambush behind the bushes;

bushes; but as soon as I threw ashore some knives and other toys, they came out, flung down their weapons, and came into the water by the boat's side, making signs of friendship by pouring water on their heads with one hand, which they dipped into the sea: the next day, in the afternoon, several other canoes came aboard, and brought many roots and fruits which we purchased.

This island has no name in our draughts, but the natives call it *Pulo Sabuda*: it is about three leagues long, and two miles wide, more or less; it is of a good height, so as to be seen eleven or twelve leagues: it is very rocky, yet above the rocks there is good yellow and black mould, not deep, yet producing plenty of good tall trees, and bearing any fruits or roots which the inhabitants plant. I do not know all its produce, but what we saw were plaintains, cocoa-nuts, pine-apples, oranges, papaes, potatoes, and other large roots. Here are also another sort of wild jacas, about the bigness of a man's two fists, full of stones or kernels, which eat pleasant enough when roasted. The libby tree grows here in the swampy valleys, of which they make sago cakes: I did not see them make any, but was told by the inhabitants that it was made of the pith of the tree, in the same manner I have described in my *Voyage round the World*; they shewed me the tree whereof it was made, and I bought about forty of the cakes; I bought also three or four nutmegs in their shell, which did not seem to have been long gathered, but whether they be the growth of this island or not, the natives would not tell whence they had them, and seemed to prize them very much. What beasts the island affords I know not, but here are both sea and land fowl. Of the first, boobies and men-of-war-birds are the chief; some goldens, and small milk-white crab-catchers: the land-fowls are pigeons, about the bigness of mountain-pigeons in Jamaica, and crows about the bigness of those in England, and much like them, but the inner part of their feathers are white, and the outside black, so that they appear all black, unless you extend the feathers: here are large sky-coloured birds, such as we lately killed on New Guinea, and many other small birds, unknown to us: here are likewise abundance of bats, as big as young coney, their necks, head, ears and noses like foxes, their hair rough, that about their necks is of a whitish yellow, that on their heads and shoulders black, their wings are four feet over from tip to tip; they smell like foxes: the fish are bass, rock-fish, and a sort of fish like mullets, oldwives, whip-rays, and some other sorts that I know not, but no great plenty of any, for it is deep water till within less than a mile of the shore, then there is a bank of coral rocks within which you have shoal-water, white clean sand; so there is no good fishing with the line.

This island lies in latitude  $2^{\circ} 43'$  south, and meridian distance from port Babo, on the island Timor, four hundred and eighty-six miles: besides this island, here are nine or ten other small islands.

The inhabitants of this island are a sort of very tawny Indians, with long black hair, who in their manners differ but little from the Mindanayans, and others of these eastern islands. These seem to be the chief; for besides them we saw also shock curl-pated New-Guinea negroes, many of which are slaves to the others, but I think not all: they are very poor, wear no cloaths, but have a clout about their middle, made of the rinds of the tops of palm-tree trees; but the women had a sort of callico cloaths. Their chief ornaments are blue and yellow beads, worn about their wrists. The men arm themselves with bows and arrows, lances, broad swords, like those of Mindanao; their lances are pointed with bone: they strike fish very ingeniously with wooden fish-gigs, and have a very ingenious way of making the fish rise; for they have a piece of wood curiously carved, and painted much like a dolphin (and perhaps other figures); these they

they let down into the water by a line with a small weight to sink it ; when they think it low enough, they haul the line into their boats very fast, and the fish rise up after this figure, and they stand ready to strike them when they are near the surface of the water ; but their chief livelihood is from their plantations ; yet they have large boats, and go over to New Guinea, where they get slaves, fine parrots, &c. which they carry to Goram and exchange for callicos. One boat came from thence a little before I arrived here, of whom I bought some parrots, and would have bought a slave, but they would not barter for any thing but callicos, which I had not. Their houses on this side were very small, and seemed only to be for necessity ; but on the other side of the island we saw good large houses : their proes are narrow, with outriggers on each side, like other Malaysans. I cannot tell of what religion these are ; but I think they are not Mahometans, by their drinking brandy out of the same cup with us without any scruple. At this island we continued till the 20th instant, having laid in store of such roots and fruits as the island afforded.

On the 20th, at half an hour after six in the morning, I weighed, and standing out we saw a large boat full of men lying at the north point of the island. As we passed by, they rowed towards their habitations, where we supposed they had withdrawn themselves for fear of us, though we gave them no cause of terror, or for some differences among themselves.

We stood to the northward till seven in the evening, then saw a rippling ; and the water being discoloured, we sounded, and had but twenty-two fathom. I went about and stood to the westward till two next morning, then tacked again, and had these several soundings : at eight in the evening, twenty-two ; at ten, twenty-five ; at eleven, twenty-seven ; at twelve, twenty-eight fathom ; at two in the morning twenty-six ; at four, twenty-four ; at six, twenty-three ; at eight, twenty-eight ; at twelve, twenty-two.

We passed by many small islands, and among many dangerous shoals, without any remarkable occurrence, till the 4th of February, when we got within three leagues of the north-west cape of New Guinea, called by the Dutch Cape Mabo. Off this cape there lies a small woody island, and many islands of different sizes to the north and north-east of it. This part of New Guinea is high land, adorned with tall trees, that appeared very green and flourishing. The Cape itself is not very high, but ends in a low sharp point, and on either side there appears another such point at equal distances, which makes it resemble a diamond. This only appears when you are abreast of the middle point, and then you have no ground within three leagues of the shore.

In the afternoon we passed by the cape, and stood over for the islands. Before it was dark, we were got within a league of the westernmost, but had no ground with fifty fathom of line : however, fearing to stand nearer in the dark, we tacked and stood to the east, and plied all night. The next morning we were got five or six leagues to the eastward of that island, and having the wind easterly, we stood in to the northward among the islands, sounded, and had no ground ; then I sent in my boat to sound, and they had ground with fifty fathom near a mile from the shore. We tacked before the boat came aboard again, for fear of a shoal that was about a mile to the east of that island the boat went to, from whence also a shoal-point stretched out itself till it met the other : they brought with them such a cockle, as I have mentioned in my voyage round the world, found near Celebes, and they saw many more, some bigger than that which they brought aboard, as they said, and for this reason I named it Cockle Island. I sent them to sound again, ordering them to fire a musket

if



if they found good anchoring; we were then standing to the southward, with a fine breeze. As soon as they fired, I tacked and stood in; they told me they had fifty fathom when they fired. I tacked again, and made all the sail I could to get out, being near some rocky islands and shoals to leeward of us. The breeze increased, and I thought we were out of danger, but having a shoal just by us, and the wind falling again, I ordered the boat to tow us, and by their help we got clear from it. We had a strong tide setting to the westward.

At one o'clock, being past the shoal, and finding the tide setting to the westward, I anchored in thirty-five fathom coarse sand, with small coral and shells. Being nearest to Cockle Island, I immediately sent both the boats thither, one to cut wood, and the other to fish. At four in the afternoon, having a small breeze at south-south-west, I made a sign for my boats to come on board. They brought some wood, and a few small cockles, none of them exceeding ten pounds weight, whereas the shell of the great one weighed seventy-eight pounds; but it was now high water, and therefore they could get no bigger: they also brought on board some pigeons, of which we found plenty on all the islands where we touched in these seas: also in many places we saw many large bats, but killed none, except those I mentioned at Pulo Sabuda. As our boats came aboard, we weighed and made sail, steering east-south-east as long as the wind held. In the morning we found we had got four or five leagues to the east of the place where we weighed. We stood to and fro till eleven; and finding that we lost ground, anchored in forty-two fathom coarse gravelly sand, with some coral. This morning we thought we saw a sail.

In the afternoon I went ashore on a small woody island, about two leagues from us. Here I found the greatest number of pigeons that ever I saw either in the East or West Indies, and small cockles in the sea round the island, in such quantities that we might have laden the boat in an hour's time. These were not above ten or twelve pounds weight. We cut some wood, and brought off cockles enough for all the ship's company, but having no small shot, we could kill no pigeons. I returned about four o'clock, and then my gunner and both mates went thither, and in less than three quarters of an hour they killed and brought off ten pigeons. Here is a tide: the flood sets west and the ebb east, but the latter is very faint, and but of small continuance; and so we found it ever since we came from Timor: the winds we found easterly, between north-east and east-south-east, so that if these continue, it is impossible to beat farther to the eastward on this coast against wind and current. These easterly winds increased from the time we were in the latitude of about  $2^{\circ}$  south, and as we drew nigher the line they hung more easterly: and now being to the north of the continent of New Guinea, where the coast lies east and west, I find the trade-wind here at east, which yet in higher latitudes is usually at north-north-west and north-west; and so I did expect them here, it being to the south of the line.

The 7th, in the morning, I sent my boat ashore on Pigeon Island, and staid till noon. In the afternoon my men returned, brought twenty-two pigeons, and many cockles, some very large, some small: they also brought one empty shell, that weighed two hundred and fifty-eight pounds.

At four o'clock we weighed, having a small westerly wind and a tide with us; at seven in the evening we anchored in forty-two fathom, near King William's Island, where I went ashore the next morning, drank His Majesty's health, and honoured it with his name. It is about two leagues and a half in length, very high, and extraordinarily well clothed with woods; the trees are of divers sorts, most unknown to us, but all very green and flourishing; many of them had flowers, some white, some purple,



ple, others yellow; all which smelt very fragrantly: the trees are generally tall and straight bodied, and may be fit for any use. I saw one of a clean body, without knot or limb, sixty or seventy feet high by estimation: it was three of my fathoms about, and kept its bigness, without any sensible decrease, even to the top. The mould of the island is black, but not deep, it being very rocky. On the sides and top of the island are many palmeto trees, whose heads we could discern over all the other trees, but their bodies we could not see.

About one in the afternoon we weighed and stood to the eastward, between the main and King William's Island, leaving the island on our larboard side, and sounding till we were past the island, and then we had no ground. Here we found the flood setting east-by-north, and the ebb west-by-south; there were shoals and small islands between us and the main, which caused the tide to set very inconstantly, and make many whirlings in the water; yet we did not find the tide to set strong any way, nor the water to rise much.

On the 9th, being to the eastward of King William's Island, we plied all day between the main and other islands, having easterly winds and fair weather till seven the next morning; then we had very hard rain till eight, and saw many shoals of fish: we lay becalmed off a pretty deep bay on New Guinea, about twelve or fourteen leagues wide, and seven or eight leagues deep, having low land near its bottom, but high land without. The easternmost part of New Guinea seen, bore east-by-south, distant twelve leagues; Cape Mabo west-south-west half-south, distant seven leagues.

At one in the afternoon it began to rain, and continued till six in the evening, so that having but little wind and most calms, we lay still off the fore-mentioned bay, having King William's Island still in sight, though distant by judgment fifteen or sixteen leagues west. We saw many shoals of small fish, some sharks, and seven or eight dolphins, but caught none. In the afternoon, being about four leagues from the shore, we saw an opening in the land, which seemed to afford good harbour. In the evening we saw a large fire there, and I intended to go in (if winds and weather would permit) to get some acquaintance with the natives.

Since the 4th instant that we passed Cape Mabo, to the 12th, we had small easterly winds and calms, so that we anchored several times, where I made my men cut wood, that we might have a good stock when a westerly wind should present, and so we plied to the eastward, as winds and currents would permit, having not got in all above thirty leagues to the eastward of Cape Mabo; but on the 12th, at four in the afternoon, a small gale sprung up at north-east-by-north, with rain; at five it shifted about to north-west, from thence to the south-west, and continued between those two points a pretty brisk gale, so that we made sail and steered away north-east, till the 13th, in the morning, to get about the Cape of Good Hope; when it was day we steered north-east half-east, then north-east-by-east, till seven o'clock, and being then seven or eight leagues off shore, we steered away east, the more trending east-by-south: we had very much rain all night, so that we could not carry much sail, yet we had a very steady gale. At eight this morning the weather cleared up, and the wind decreased to a fine top-gallant gale, and settled at west by south. We had more rain these three days past, than all the voyage, in so short a time. We were now about six leagues from the land of New Guinea, which appeared very high; and we saw two head-lands about twenty leagues asunder, the one to the east, and the other to the west, which last is called the Cape of Good Hope. We found variation east 4°.

The 15th, in the morning, between twelve and two o'clock, it blew a very brisk gale at north-west, and looked very black in the south-west. At two it flew about at once to the

the south-south-west, and rained very hard. The wind settled sometime at west-south-west, and we steered east-north-east till three in the morning; then the wind and rain abating, we steered east-half-north for fear of coming near the land. Presently after, it being a little clear, the man at the bowsprit end, called out, land on our starboard bow; we looked out and saw it plain: I presently sounded, and had but ten fathom soft ground. The master, being somewhat scared, came running in haste with this news, and said it was best to anchor; I told him no, but sound again; then we had twelve fathom; the next cast thirteen and a half; the fourth, seventeen fathom; and then no ground with fifty fathom line. However, we kept off the island, and did not go so fast but that we could see any other danger before we came nigh it; for here might have been more islands not laid down in my drafts besides this; for I searched all the drafts I had, if perchance I might find any island in the one, which was not in the others, but I could find none near us. When it was day, we were about five leagues off the land we saw; but, I believe, not above five miles, or at most two leagues off it, when we first saw it in the night.

This is a small island, but pretty high; I named it Providence. About five leagues to the southward of this, there is another island, which is called William Scouten's Island, and laid down in our drafts; it is a high island, and about twenty leagues long.

It was by mere providence that we missed the small island; for had not the wind come to west-south-west, and blown hard, so that we steered east-north-east, we had been upon it by our course that we steered before, if we could not have seen it. This morning we saw many great trees and logs swim by us; which, it is probable, came out of some great rivers on the main.

On the 16th, we crossed the line, and found variation 6° 26' east. The 18th, by my observation at noon, we found that we had had a current setting to the southward, and probably that drew us in so nigh Scouten's Island. For this twenty-four hours we steered east-by-north with a large wind, yet made but an east-by-south half-south course, though the variation was not above 7° east.

The 21st, we had a current setting to the northward, which is against the true trade monsoon, it being now near the full moon. I did expect it here, as in all other places. We had variation 8° 45' east. The 22d we found but little current, if any, it set to the southward.

On the 23d, in the afternoon, we saw two snakes, and the next morning another, passing by us, which was furiously assaulted by two fishes, that had kept us company five or six days; they were shaped like mackerel, and were about that bigness and length, and of a yellow greenish colour. The snake swam away from them very fast, keeping his head above water; the fish snapped at his tail, but when he turned himself, that fish would withdraw, and another would snap, so that by turns they kept him employed, yet he still defended himself, and swam away a great pace, till they were out of sight.

The 25th, betimes in the morning, we saw an island to the southward of us, at about fifteen leagues distance. We steered away for it, supposing it to be that which the Dutch call Wishart's Island, but finding it otherwise, I called it Matthias, it being that faint's day. This island is about nine or ten leagues long, mountainous and woody, with many savannahs, and some spots of land which seemed to be cleared.

At eight in the evening we lay by, intending, if I could, to anchor under Matthias Isle; but the next morning, seeing another island about seven or eight leagues to the eastward of it, we steered away for it; at noon we came up fair with its south-west end,

intending to run along by it, and anchor on the south-east side, but the tornadoes came in so thick and hard, that I could not venture in. This island is pretty low and plain, and clothed with wood; the trees were very green, and appeared to be large and tall, as thick as they could stand one by another. It is about two or three leagues long, and at the south-west point there is another small low woody island, about a mile round, and about a mile from the other. Between them there runs a reef of rocks, which joins them. (The biggest, I named Squally Island).

Seeing we could not anchor here, I stood away to the southward, to make the main; but having many hard squalls and tornadoes, we were often forced to hand all our sails and steer more easterly to go before it. On the 26th, at four o'clock, it cleared up to a hard sky, and a brisk settled gale; then we made as much sail as we could. At five it cleared up over the land, and we saw, as we thought, Cape Solomawer bearing south-south-east, distance ten leagues. We had many great logs and trees swimming by us all this afternoon, and much grass; we steered in south-south-east till six, then the wind slackened, and we stood off till seven, having little wind; then we lay by till ten, at which time we made sail, and steered away east all night. The next morning, as soon as it was light, we made all the sail we could, and steered away east-south-east, as the land lay, being fair in sight of it, and not above seven leagues distance. We passed by many small low woody islands which lay between us and the main, not laid down in our drafts. We found variation  $9^{\circ} 50'$  east.

The 28th we had many violent tornadoes, wind, rain, and some spouts, and in the tornadoes the wind shifted. In the night we had fair weather, but more lightning than we had seen at any time this voyage. This morning we left a large high island on our larboard-side, called in the Dutch drafts Wilhart's Isle, about six leagues from the main, and seeing many smoaks upon the main, I therefore steered towards it.

The main land at this place is high and mountainous, adorned with tall flourishing trees; the sides of the hills had many large plantations and patches of clear land, which, together with the smoaks we saw, were certain signs of its being well inhabited; and I was desirous to have some commerce with the inhabitants. Being nigh shore, we saw first one proe, a little after, two or three more, and at last a great many boats came from all the adjacent bays; when they were forty-six in number they approached so near us, that we could see each others signs, and hear each other speak, though we could not understand them, nor they us; they made signs for us to go in towards the shore, pointing that way; it was squally weather, which at first made me cautious of going too near; but the weather beginning to look pretty well, I endeavoured to get into a bay a-head of us, which we could have got into well enough at first; but while we lay by, we were driven so far to leeward, that now it was more difficult to get in. The natives lay in their proes round us; to whom I shewed beads, knives, glasses, to allure them to come nearer, but they would not come so nigh as to receive any thing from us; therefore I threw out some things to them, viz. a knife fastened to a piece of board, and a glass bottle corked up with some beads in it, which they took up and seemed well pleased. They often struck their left breast with their right hand, and as often held up a black truncheon over their heads, which we thought was a token of friendship, wherefore we did the like: and when we stood in towards their shore, they seemed to rejoice, but when we stood off, they frowned, yet kept us company in their proes, still pointing to the shore. About five o'clock we got within the mouth of the bay, and sounded several times, but had no ground, though within a mile of the shore. The bottom of this bay was above two miles within us, into which we might have gone; but as I was not assured of anchorage there, so I thought it not prudent

to run in at this time, it being near night, and seeing a black tornado rising in the west, which I most feared; besides, we had near two hundred men in proes, close by us; and the bays on the shore were lined with men from one end to the other, where there could not be less, than three or four hundred more. What weapons they had, we know not, nor yet their design; therefore I had, at their first coming near us, got up all our small arms, and made several put on cartouch boxes to prevent treachery. At last I resolved to go out again; which, when the natives in their proes perceived, they began to sling stones at us as fast as they could, being provided with engines for that purpose, wherefore I named this place Slinger's Bay; but at the firing of one gun they were all amazed, drew off, and flung no more stones. They got together, as if consulting what to do, for they did not make in towards the shore, but lay still, though some of them were killed or wounded, and many more of them had paid for their boldness, but that I was unwilling to cut off any of them; which if I had done, I could not hope afterwards to bring them to treat with me.

The next day we sailed close by an island, where we saw many smoke, and men in the bays; out of which came two or three canoes, taking much pains to overtake us but they could not, though we went with an easy sail, and I could not now stay for them. As I past by the south-east point, I sounded several times within a mile of the Sandy Bays, but had no ground: about three leagues to the northward of the south-east point, we opened a large deep bay, secured from west-north-west and south-west winds. There were two other islands that lay to the north-east of it, which secured the bay from north-east winds: one was but small, yet woody; the other was a league long, inhabited, and full of cocoa-nut-trees. I endeavoured to get into this bay, but there came such squalls off from the high land over it, that I could not; besides, we had many hard squalls, which deterred me from it; and night coming on, I would not run any hazard, but bore away to the small inhabited island, to see if we could get anchorage on the east side of it. When we came there, we found the island so narrow, that there could be no shelter; therefore I tacked and stood toward the greater island again; and being more than midway between both, I lay by, designing to endeavour for anchorage next morning. Between seven and eight at night, we spied a canoe close by us, and seeing no more, suffered her to come aboard. She had three men in her, who brought off five cocoa-nuts, for which I gave each of them a knife and a string of beads, to encourage them to come off again in the morning; but before these went away, we saw two more canoes coming; therefore we stood away to the northward from them, and then lay by again till day. We saw no more boats this night, neither designed to suffer any to come aboard in the dark.

By nine o'clock the next morning, we were got within a league of the great island, but were kept off by violent gusts of wind. These squalls gave us warning of their approach, by the clouds which hung over the mountains, and afterwards descended to the foot of them; and then it is we expect them speedily.

On the 3d of March, being about five leagues to leeward of the great island, we saw the main land a-head, and another great high island to leeward of us, distance about seven leagues; which we bore away for. It is called in the Dutch drafts Garret Dennis Isle. It is about fourteen or fifteen leagues round; high and mountainous, and very woody; some trees appeared very large and tall; and the bays by the sea-side are well stored with cocoa-nut trees; where we also saw some small houses. The sides of the mountains are thick set with plantations; and the mould in the new cleared land seemed to be of a brown reddish colour. This island is of no regular figure, but is full of points shooting forth into the sea, between which are many sandy bays, full of cocoa-nut trees. The middle

of the ile lies in  $3^{\circ} 10'$  south latitude. It is very populous; the natives are very black, strong, and well limbed people; having great round heads, their hair naturally curled and short, which they shave into several forms, and dye it also of divers colours, viz. red, white, and yellow. They have broad round faces, with great bottle-noses, yet agreeable enough, till they disfigure them by painting, and by wearing great things through their noses as big as a man's thumb, and about four inches long; these are run clear through both nostrils, one end coming out by one cheek-bone, and the other end against the other; and their noses so stretched, that only a small slip of them appears about the ornament; they have also great holes in their ears, wherein they wear such stuff as in their noses. They are very dextrous active fellows in their proes, which are very ingeniously built. They are narrow and long, with out-riggers on one side, the head and stern higher than the rest, and carved into many devices, viz. some fowl, fish, or a man's head painted or carved; and though it is but rudely done, yet the resemblance appears plainly, and shews an ingenious fancy. But with what instruments they make their proes or carved work, I know not, for they seem to be utterly ignorant of iron. They have very neat paddles, with which they manage their proes dextrously, and make great way through the water. Their weapons are chiefly lances, swords and slings, and some bows and arrows: they have also wooden fish-gigs, for striking fish. Those that came to assault us in Slingers Bay on the main, are in all respects like these; and I believe these are alike treacherous. Their speech is clear and distinct; the words they used most, when near us, were *vacousee allamais*, and then they pointed to the shore. Their signs of friendship are either a great truncheon, or bow of a tree full of leaves, put on their heads, often striking their heads with their hands.

The next day, having a fresh gale of wind, we got under a high island, about four or five leagues round, very woody, and full of plantations upon the sides of the hills; and in the bays, by the water-side, are abundance of cocoa-nut trees. It lies in the latitude of  $3^{\circ} 25'$  south, and meridian distance from Cape Mabo 1316 miles. On the south-east part of it are three or four other small woody islands, one high and peaked, the other low and flat, all bedecked with cocoa-nut trees and other wood. On the north there is another island of an indifferent height, and of a somewhat larger circumference than the great high island last-mentioned. We passed between this and the high island. The high island is called in the Dutch drafts Anthony Cave's Island. As for the flat low island, and the other small one, it is probable they were never seen by the Dutch, nor the islands to the north of Garret Dennis's Island. As soon as we came near Cave's Island, some canoes came about us, and made signs for us to come ashore, as all the rest had done before, probably thinking we could run the ship a ground any where, as they did their proes, for we saw neither sail nor anchor among any of them, though most Eastern Indians have both. These had proes made of one tree, well dug, with out-riggers on one side; they were but small, yet well shaped. We endeavoured to anchor, but found no ground within a mile of the shore; we kept close along the north-side, still sounding till we came to the north-east end, but found no ground, the canoes still accompanying us, and the bays were covered with men going along as we sailed; many of them strove to swim off to us, but we left them astern. Being at the north east point, we found a strong current setting to the north-west, so that though we had steered to keep under the high island, yet we were driven towards the flat one. At this time three of the natives came on board: I gave each of them a knife, a looking-glass, and a string of beads. I shewed them pumpkins and cocoa-nut shells, and made signs to them to bring some aboard, and had presently three cocoa-nuts out of  
one

one of the canoes. I shewed them nutmegs, and by their signs I guessed they had some on the island. I also shewed them some gold-dust, which they seemed to know, and called out *Manneel*, *Manneel*, and pointed towards the land. A while after these men were gone, two or three canoes came from the flat island, and by signs invited us to their island, at which the others seemed displeased, and used very menacing gestures and (I believe) speeches to each other. Night coming on, we stood off to sea, and having but little wind all night, were driven away to the north-west. We saw many great fires on the flat island. The last men that came off to us were all black, as those we had seen before, with frizzled hair; they were very tall, lusty, well-shaped men, they wear great things in their noses, and paint as the others, but not much; they make the same signs of friendship, and their language seems to be one; but the others had proes, and these canoes. On the sides of some of these we saw the figures of several fish neatly cut; and these last were not so shy as the others.

Steering away from *Cave's Island* south-south-east, we found a strong current against us, which set only in some places in streams, and in them we saw many trees and logs of wood, which drove by us. We had but little wood aboard; wherefore I hoisted out the pinnace, and sent her to take up some of this drift-wood. In a little time she came aboard with a great tree in a tow, which we could hardly hoist in with all our tackles. We cut up the tree and split it for fire-wood. It was much worm-eaten, and had in it some live worms above an inch long, and about the bigness of a goose-quill, and having their heads crusted over with a thin shell.

After this we passed by an island, called by the Dutch *St. John's Island*, leaving it to the north of us. It is about nine or ten leagues round, and very well adorned with lofty trees. We saw many plantations on the sides of the hills, and abundance of cocoa-nut trees about them, as also thick groves on the bays by the sea-side. As we came near it, three canoes came off to us, but would not come aboard; they were such as we had seen about the other islands; they spoke the same language, and made the same signs of peace, and their canoes were such as at *Cave's Island*.

We stood along by *St. John's Island*, till we came almost to the south-east point, and then seeing no more islands to the eastward of us, nor any likelihood of anchoring under this, I stood away for the main of *New Guinea*, we being now, as I supposed, to the east of it, on this north-side. My design of seeing these islands as I passed along, was to get wood and water, but could find no anchor ground, and therefore could not do as I purposed: besides, these islands are all so populous, that I dared not send my boat ashore, and so I could have anchored pretty nigh; wherefore I rather chose to prosecute my design on the main, the season of the year being now at hand, for I judged the westerly winds were nigh spent.

On the 8th of March we saw some smoke on the main, being distant from it four or five leagues: it is very high, woody land, with some spots of savannah. About ten in the morning six or seven canoes came off to us; most of them had no more than one man in them; they were all black, with short curled hair, having the same ornaments in their noses, and their heads so shaved and painted, and speaking the same words as the inhabitants of *Cave's Island* before mentioned.

There was a head-land to the southward of us, beyond which seeing no land, I supposed that from thence the land trends away more westerly. This head-land lies in the latitude of  $5^{\circ} 2'$  south, and meridian distance from *Cape Mabo* 1290 miles. In the night we lay by, for fear of over-shooting this head-land, between which and *Cape St. Maries* the land is high, mountainous and woody, having many points of land shooting

shooting out into the sea, which make so many fine bays: the coast lies north-north-east and south-south-west.

The 9th in the morning a huge black man came off to us in a canoe, but would not come aboard. He made the same signs of friendship to us as the rest we had met with; yet seemed to differ in his language, not using any of those words which the others did. We saw neither smoaks nor plantations near this head-land. We found here variation  $1^{\circ}$  east.

In the afternoon, as we plied near the shore, three canoes came off to us; one had four men in her, the others two a-piece. That with the four men came pretty nigh us, and shewed us a cocoa-nut and water in a bamboo, making signs that there was enough ashore where they lived; they pointed to the place where they would have us go, and so went away. We saw a small round pretty high island about a league to the north of this head-land, within which there was a large deep bay, whither the canoes went; and we strove to get thither before night, but could not; wherefore we stood off, and saw land to the westward of this head-land, bearing west-by-south half-south, distance about ten leagues; and, as we thought, still more land bearing south-west-by-south, distance twelve or fourteen leagues; but being clouded, it disappeared, and we thought we had been deceived. Before night we opened the head-land fair, and I named it Cape St. George. The land from hence trends away west-north-west about ten leagues, which is as far as we could see it; and the land that we saw to the westward of it in the evening, which bore west-by-south half-south, was another point about ten leagues from Cape St. George; between which there runs in a deep bay for twenty leagues or more. We saw some high land in spots like islands, down in that bay at a great distance; but whether they are islands, or the main closing there, we know not. The next morning we saw other land to the south-east of the westernmost point, which till then was clouded; it was very high land, and the same that we saw the day before that disappeared in a cloud. This Cape St. George lies in the latitude of  $5^{\circ} 5'$  south; and meridian distance from Cape Mabo 1290 miles. The island off this cape, I called St. George's Isle; and the bay between it and the west point, I named St. George's Bay. Note, no Dutch drafts go so far as this cape by ten leagues. On the 10th, in the evening, we got within a league of the westernmost land seen, which is pretty high and very woody, but no appearance of anchoring. I stood off again, designing if possible, to ply to and fro in this bay, till I found a conveniency to wood and water. We saw no more plantations nor cocoa-nut-trees; yet in the night we discerned a small fire right against us. The next morning we saw a burning mountain in the country. It was round, high, and peaked at top, as most volcanoes are, and sent forth a great quantity of smok. We took up a log of drift wood, and split it for firing; in which we found some small fish.

The day after, we passed by the south-west cape of this bay, leaving it to the north of us: when we were abreast of it, I called my officers together, and named it Cape Orford, in honour of my noble patron, drinking his Lordship's health. This cape bears from Cape St. George south-west about eighteen leagues. Between them there is a bay about twenty-five leagues deep, having pretty high land all round it, especially near the capes, though they themselves are not high. Cape Orford lies in the latitude of  $5^{\circ} 24'$  south, by my observation; and meridian distance from Cape St. George, forty-four miles west. The land trends from this cape north-west by west into the bay, and on the other side south-west per compass, which is south-west  $9^{\circ}$  west, allowing the variation, which is here  $9^{\circ}$  east. The land on each side of the cape is more savannah than wood land, and is highest on the north-west side. The cape itself is a bluff-



bluff-point, of an indifferent heighth, with a flat table-land at top. When we were to the south-west of the cape, it appeared to be a low point shooting out, which you cannot see when abreast of it. This morning we struck a log of drift-wood with our turtle-irons, hoisted it in, and split it for fire-wood. Afterwards we struck another, but could not get it in. There were many fish about it.

We steered along south-west as the land lies, keeping about six leagues off the shore; and being desirous to cut wood and fill water, if I saw any conveniency, I lay by in the night, because I would not miss any place proper for those ends, for fear of wanting such necessaries as we could not live without. This coast is high and mountainous, and not so thick with trees as that on the other side of Cape Orford.

On the 14th, seeing a pretty deep bay a-head, and some islands where I thought we might ride secure, we ran in towards the shore and saw some smoaks. At ten o'clock we saw a point, which shot out pretty well into the sea, with a bay within it, which promised fair for water; and we stood in with a moderate gale. Being got into the bay within the point, we saw many cocoa-nut-trees, plantations, and houses. When I came within four or five miles of the shore, six small boats came off to view us, with about forty men in them all. Perceiving that they only came to view us, and would not come aboard, I made signs and waved to them to go ashore; but they did not or would not understand me; therefore I whistled a shot over their heads out of my fowling-piece, and then they pulled away for the shore as hard as they could. These were no sooner ashore, but we saw three boats coming from the islands to leeward of us, and they soon came within call, for we lay becalmed. One of the boats had about forty men in her, and was a large well-built boat; the other two were but small. Not long after, I saw another boat coming out of the bay where I intended to go; she likewise was a large boat, with a high head and stern painted, and full of men; this I thought came off to fight us, as it is probable they all did; therefore I fired another small shot over the great boat that was nigh us, which made them leave their babbling and take to their paddles. We still lay becalmed; and therefore they rowing wide of us, directed their course toward the other great boat that was coming off: when they were pretty near each other I caused the gunner to fire a gun between them, which he did very dexterously; it was loaden with round and partridge-shot; the last dropped in the water somewhat short of them, but the round shot went between both boats, and grazed about one hundred yards beyond them; this so affrighted them, that they both rowed away for the shore as fast as they could, without coming near each other; and the little boats made the best of their way after them: and now having a gentle breeze at south-south-east, we bore into the bay after them. When we came by the point, I saw a great number of men peeping from under the rocks: I ordered a shot to be fired close by, to scare them. The shot grazed between us and the point, and mounting again, flew over the point, and grazed a second time just by them. We were obliged to sail along close by the bays; and seeing multitudes setting under the trees, I ordered a third gun to be fired among the cocoa-nut-trees to scare them; for my business being to wood and water, I thought it necessary to strike some terror into the inhabitants, who were very numerous, and (by what I saw now, and had formerly experienced) treacherous. After this I sent my boat to sound; they had first forty, then thirty, and at last twenty fathom water. We followed the boat, and came to anchor about a quarter of a mile from the shore, in twenty-six fathom water, fine black sand and oaze. We rode right against the mouth of a small river, where I hoped to find fresh water. Some of the natives standing on a small point at the river's mouth, I sent a small shot over their heads to fright them, which it did effectually. In the after-

noon I sent my boat ashore to the natives who stood upon the point by the river's mouth with a present of cocoa-nuts; when the boat was come near the shore, they came running into the water, and put their nuts into the boat. Then I made a signal for the boat to come aboard, and sent both it and the yawl into the river to look for fresh water, ordering the pinnace to lie near the river's mouth, while the yawl went up to search. In an hour's time they returned aboard with some barrecoes full of fresh water, which they had taken up about half a mile up the river. After which I sent them again with casks, ordering one of them to fill water, and the other to watch the motions of the natives, lest they should make any opposition; but they did not, and so the boats returned a little before sun-set with a tun and half of water; and the next day by noon brought aboard about six tuns of water.

I sent ashore commodities to purchase hogs, &c. being informed that the natives have plenty of them, as also of yams and other good roots; but my men returned without getting any thing that I sent them for; the natives being unwilling to trade with us; yet they admired our hatchets and axes, but would part with nothing but cocoa-nuts, which they used to climb the trees for; and so soon as they gave them our men, they beckoned to them to be gone, for they were much afraid of us.

The 18th, I sent both boats again for water, and before noon they had filled all my casks. In the afternoon I sent them both to cut wood; but seeing about forty natives standing on the bay at a small distance from our men, I made a signal for them to come aboard again, which they did, and brought me word that the men which we saw on the bay were passing that way, but were afraid to come nigh them. At four o'clock I sent both the boats again for more wood, and they returned in the evening. Then I called my officers to consult whether it were convenient to stay here longer, and endeavour a better acquaintance with these people, or go to sea. My design of tarrying here longer, was, if possible, to get some hogs, goats, yams, or other roots; as also to get some knowledge of the country and its product. My officers unanimously gave their opinions for staying longer here. So the next day I sent both boats ashore again, to fish and to cut more wood. While they were ashore, about thirty or forty men and women passed by them; they were a little afraid of our people at first, but upon their making signs of friendship, they passed by quietly; the men finely bedecked with feathers of divers colours about their heads, and lances in their hands; the women had no ornament about them, nor any thing to cover their nakedness, but a bunch of small green boughs before and behind, stuck under a string which came round their waists. They carried large baskets on their heads, full of yams. And this I have observed amongst all the wild natives I have known, that they make their women carry the burdens, while the men walk before, without any other load than their arms and ornaments. At noon our men came aboard with the wood they had cut, and had caught but six fishes at four or five hauls of the fain, though we saw abundance of fish leaping in the bay all the day long.

In the afternoon I sent the boats ashore for more wood; and some of our men went to the natives' houses, and found they were now more shy than they used to be; had taken down all the cocoa-nuts from the trees, and driven away their hogs. Our people made signs to them to know what was become of their hogs, &c. The natives pointing to some houses in the bottom of the bay, and imitating the noise of those creatures, seemed to intimate that there were both hogs and goats of several sizes, which they expressed by holding their hands abroad at several distances from the ground.

At night our boats came aboard with wood ; and the next morning I went myself with both boats up the river to the watering-place, carrying with me all such trifles and iron-work as I thought most proper to induce them to a commerce with us ; but I found them very shy and roguish. I saw but two men and a boy : one of the men by some signs was persuaded to come to the boat's side, where I was ; to him I gave a knife, a string of beads, and a glass-bottle ; the fellow called out, " Cocos, cocos," pointing to a village hard by, and signified to us that he would go for some ; but he never returned to us : and thus they had frequently of late served our men. I took eight or nine men with me, and marched to their houses, which I found very mean, and their doors made fast with withes.

I visited three of their villages, and finding all the houses thus abandoned by the inhabitants, who carried with them all their hogs, &c. I brought out of their houses some small fishing-nets in recompence for those things they had received of us. As we were coming away we saw two of the natives ; I shewed them the things that we carried with us, and called to them, " Cocos, cocos," to let them know that I took these things because they had not made good what they had promised by their signs, and by their calling out Cocos. While I was thus employed, the men in the yawl filled two hogheads of water, and all the barrecoes. About one in the afternoon I came aboard, and found all my officers and men very importunate to go to that bay where the hogs were said to be. I was loth to yield to it, fearing they would deal too roughly with the natives. By two o'clock in the afternoon many black clouds gathered over the land, which I thought would deter them from their enterprize ; but they solicited me the more to let them go. At last I consented, sending those commodities I had ashore with me in the morning, and giving them a strict charge to deal by fair means, and to act cautiously for their own security. The bay I sent them to was about two miles from the ship. As soon as they were gone, I got all things ready, that, if I saw occasion, I might assist them with my great guns. When they came to land, the natives in great companies stood to resist them, shaking their lances, and threatening them ; and some were so daring, as to wade into the sea, holding a target in one hand and a lance in the other. Our men held up to them such commodities as I had sent, and made signs of friendship, but to no purpose, for the natives waved them off. Seeing therefore they could not be prevailed upon to a friendly commerce, my men, being resolved to have some provision among them, fired some muskets to scare them away ; which had the desired effect upon all but two or three, who stood still in a menacing posture, till the boldest dropped his target and ran away ; they supposed he was shot in the arm : he and some others felt the smart of our bullets, but none were killed ; our design being rather to fright than to kill them. Our men landed, and found abundance of tame hogs running among the houses. They shot down nine, which they brought away, besides many that ran away wounded. They had but little time ; for in less than an hour after they went from the ship it began to rain ; wherefore they got what they could into the boats, for I had charged them to come away if it rained. By the time the boat was aboard, and the hogs taken in, it cleared up, and my men desired to make another trip thither before night ; this was about five in the evening, and I consented, giving them orders to repair on board before night. In the close of the evening they returned accordingly, with eight hogs more, and a little live pig ; and by this time the other hogs were jerked and salted. These that came last we only dressed and corned till morning ; and then sent both boats ashore for more refreshments either of hogs or roots : but in the night the natives had conveyed away their provisions of all sorts. Many of them were now about the houses, and none offered to resist our boats landing, but on the contrary were so amicable, that one man

brought ten or twelve cocoa-nuts, left them on the shore after he had shewed them to our men, and went out of sight. Our people finding nothing but nets and images, brought some of them away, which two of my men brought aboard in a small canoe, and presently after my boats came off. I ordered the boatwain to take care of the nets till we came at some place where they might be disposed of for some refreshment for the use of all the company. The images I took into my own custody.

In the afternoon I sent the canoe to the place from whence she had been brought, and in her two axes, two hatchets (one of them helved), six knives, six looking-glasses, a large bunch of beads, and four glass bottles. Our men drew the canoe ashore, placed the things to the best advantage in her, and came off in the pinnace which I sent to guard them: and now being well stocked with wood, and all my water-casks full, I resolved to sail the next morning. All the time of our stay here we had very fair weather, only sometimes in the afternoon we had a shower of rain, which lasted not above an hour at most; also some thunder and lightning, with very little wind: we had sea and land breezes, the former between the south-south-east, and the latter from north-east to north-west.

This place I named Port Montague, in honour of my noble patron: it lies in the latitude of  $6^{\circ} 10'$  south, and meridian distance from Cape St. George, one hundred and fifty-one miles west. The country hereabouts is mountainous and woody, full of rich valleys and pleasant fresh water-brooks. The mould in the valleys is deep and yellowish, that on the sides of the hill of a very brown colour, and not very deep, but rocky underneath, yet excellent planting land. The trees in general are neither very straight, thick nor tall, yet appear green and pleasant enough; some of them bore flowers, some berries, and others big fruits, but all unknown to any of us: cocoa-nut-trees thrive very well here, as well on the bays by the sea-side, as more remote among the plantations; the nuts are of an indifferent size, the milk and kernel very thick and pleasant. Here is ginger, yams, and other very good roots for the pot, that our men saw and tasted: what other fruits or roots the country affords, I know not. Here are hogs and dogs; other land-animals we saw none. The fowls we saw and knew, were pigeons, parrots, cockadores, and crows like those in England; a sort of birds about the bigness of a black-bird, and smaller birds many. The sea and rivers have plenty of fish; we saw abundance, though we caught but few, and these were cavallies, yellow-tails and whip-rays.

We departed from hence on the 22d of March, and on the 24th, in the evening, we saw some high land bearing north-west half-west, to the west of which we could see no land, though there appeared something like land bearing west a little southerly, but not being sure of it, I steered west-north-west all night, and kept going on with an easy sail, intending to coast along the shore at a distance. At ten o'clock, I saw a great fire bearing north-west-by-west, blazing up in a pillar, sometimes very high for three or four minutes, then falling quite down for an equal space of time; sometimes hardly visible, till it blazed up again. I had laid me down, having been indisposed these three days; but upon a sight of this, my chief mate called me; I got up and viewed it for about half an hour, and knew it to be a burning-hill by its intervals: I charged them to look well out, having bright moon-light. In the morning I found that the fire we had seen the night before, was a burning-island, and steered for it. We saw many other islands, one large high island, and another smaller, but pretty high. I stood near the volcano, and many small low islands with some shoals.

\* March the 25th, 1700, in the evening, we came within three leagues of this burning-hill, being at the same time two leagues from the main; I found a good channel to

pass between them, and kept nearer the main than the island. At seven in the evening I founded, and had fifty-two fathom fine sand and oaze. I stood to the northward to get clear of this streight, having but little wind and fair weather. The island all night vomited fire and smoke very amazingly, and at every belch we heard a dreadful noise like thunder, and saw a flame of fire after it, the most terrifying that ever I saw; the intervals between its belches were about half a minute, some more, others less; neither were these pulses or eruptions alike, for some were but faint convulsions, in comparison of the more vigorous; yet even the weakest vented a great deal of fire; but the largest made a roaring noise, and sent up a large flame twenty or thirty yards high; and then might be seen a great stream of fire running down to the foot of the island, even to the shore. From the furrows made by this descending fire, we could, in the day time, see great smoaks arise, which probably were made by the sulphureous matter thrown out of the funnel at the top, which tumbling down to the bottom, and there lying in a heap, burned till either consumed or extinguished; and as long as it burned and kept its heat, so long the smook ascended from it; which we perceived to increase or decrease, according to the quantity of matter discharged from the funnel: but the next night, being shot to the westward of the burning-island, and the funnel of it lying on the south-side, we could not discern the fire there, as we did the smook in the day when we were to the southward of it. This volcano lies in the latitude of  $5^{\circ} 33'$  south, and meridian distance from Cape St. George, three hundred and thirty-two miles west.

The easternmost part of New Guinea lies forty miles to the westward of this tract of land; and by hydrographers they are made joining together; but here I found an opening and passage between, with many islands, the largest of which lie on the north side of this passage or streight. The channel is very good, between the islands and the land to the eastward. The east part of New Guinea, is high and mountainous, ending on the north-east with a large promontory, which I named King William's Cape, in honour of His present Majesty. We saw some smoaks on it, and leaving it on our larboard side, steered away near the east land, which ends with two remarkable capes or heads, distant from each other about six or seven leagues: within each head were two very remarkable mountains, ascending very gradually from the sea side; which afforded a very pleasant and agreeable prospect. The mountains and lower land were pleasantly mixed with wood-land and savannahs; the trees appeared very green and flourishing; and the savannahs seemed to be very smooth and even; no meadow in England appears more green in the spring than these. We saw smoaks, but did not strive to anchor here, but rather chose to get under one of the islands, (where I thought I should find few or no inhabitants), that I might repair my pinnace, which was so crazy, that I could not venture ashore any where with her. As we stood over to the islands, we looked out very well to the north, but could see no land that way; by which I was well assured that we were got through, and that this east land does not join to New Guinea; therefore I named it Nova Britannia. The north-west cape, I called Cape Gloucester, and the south-west-point Cape Anne; and the north-west mountain, which is very remarkable, I called Mount Gloucester.

This island which I called Nova Britannia, has about  $4^{\circ}$  of latitude: the body of it lying in  $4^{\circ}$ , and the northernmost part in  $2^{\circ} 32'$ , and the southernmost in  $6^{\circ} 30'$  south. It has about  $5^{\circ} 18'$  longitude from east to west. It is generally high mountainous land, mixed with large valleys, which, as well as the mountains, appeared very fertile; and in most places that we saw, the trees are very large, tall and thick. It is also very well inhabited with strong well-limbed negroes, whom we found very daring and bold at several

several places. As to the product of it, I know no more than what I have said in my account of Port Mountague; but it is very probable this island may afford as many rich commodities as any in the world; and the natives may be easily brought to commerce, though I could not pretend to it under my present circumstances.

Being near the island to the northward of the Volcano, I sent my boat to sound, thinking to anchor here, but she returned and brought me word that they had no ground, till they met with a riff of coral rocks about a mile from the shore; then I bore away to the north side of the island, where we found no anchoring neither. We saw several people, and some cocoa-nut-trees, but could not send ashore for want of my pinnace, which was out of order. In the evening I stood off to sea, to be at such a distance that I might not be driven by any current upon the shoals of this island, if it should prove calm. We had but little wind, especially the beginning of the night; but in the morning I found myself so far to the west of the island, that the wind being at east-south-east, I could not fetch it, wherefore I kept on to the southward, and stemmed with the body of a high island about eleven or twelve leagues long, lying to the southward of that which I before designed for. I named this island Sir George Rook's Island.

We also saw some other islands to the westward, which may be better seen in my draft of these lands than here described; but seeing a very small island lying to the north-west of the long island which was before us, and not far from it, I steered away for that, hoping to find anchoring there; and having but little wind, I sent my boat before to sound, which, when we were about two miles distance from the shore, came on board and brought me word that there was good anchoring in thirty or forty fathom water, a mile from the isle, and within a reef of the rocks which lay in a half-moon, reaching from the north part of the island to the south-east; so at noon we got in and anchored in thirty-six fathom, a mile from the isle.

In the afternoon I sent my boat ashore to the island, to see what convenience there was to haul our vessel ashore in order to be mended, and whether we could catch any fish. My men in the boat rowed about the island, but could not land by reason of the rocks and a great surge running in upon the shore. We found variation here,  $8^{\circ} 25'$  west.

I designed to have staid among these islands till I had got my pinnace refitted; but having no more than one man who had skill to work upon her, I saw she would be a long time in repairing (which was one great reason why I could not prosecute my discoveries further); and the easterly winds being set in, I found I should scarce be able to hold my ground.

The 31st, in the forenoon, we shot in between two islands, lying about four leagues asunder, with intention to pass between them. The southernmost is a long island, with a high hill at each end; this I named Long Island. The northernmost is a round high island towering up with several heads or tops, something resembling a crown; this I named Crown Isle, from its form. Both these islands appeared very pleasant, having spots of green savannahs mixed among the wood-land: the trees appeared very green and flourishing, and some of them looked white and full of blossoms. We passed close by Crown Isle, saw many cocoa-nut trees on the bays and sides of the hills; and one boat was coming off from the shore, but returned again. We saw no smoaks on either of the islands, neither did we see any plantations, and it is probable they are not very well peopled. We saw many shoals near Crown Island, and reefs of rocks running off from the points a mile or more into the sea: my boat was once over-board, with design  
to



to have sent her ashore, but having little wind, and seeing some shoals, I hoisted her in again, and stood off out of danger.

In the afternoon, seeing an island bearing north-west-by-west, we steered away north-west-by-north, to be to the northward of it. The next morning, being about midway from the islands we left yesterday, and having this to the westward of us, the land of the main of New Guinea within us to the southward, appeared very high. When we came within four or five leagues of this island to the west of us, four boats came off to view us, one came within call, but returned with the other three without speaking to us; so we kept on for the island, which I named Sir R. Rich's island. It was pretty high, woody, and mixed with savannahs like those formerly mentioned. Being to the north of it, we saw an opening between it and another island two leagues to the west of it, which before appeared all in one. The main seemed to be high land, trending to the westward.

On Tuesday, the 2d of April, about eight in the morning, we discovered a high-peaked island to the westward, which seemed to smoak at its top: the next day we passed by the north side of the Burning Island, and saw a smoak again at its top, but the vent lying on the south side of the peak, we could not observe it distinctly, nor see the fire. We afterwards opened three more islands, and some land to the southward, which we could not well tell whether it were islands or part of the main. These islands are all high, full of fair trees and spots of great savannahs, as well the Burning Isle as the rest; but the Burning Isle was more round and peaked at top, very fine land near the sea, and for two-thirds up it: we also saw another isle sending forth a great smoak at once, but it soon vanished, and we saw it no more; we saw also, among these islands, three small vessels with sails, which the people on Nova Britannia seem wholly ignorant of.

The 11th, at noon, having a very good observation, I found myself to the northward of my reckoning, and thence concluded that we had a current setting north-west, or rather more westerly, as the land lies. From that time to the next morning we had fair clear weather, and a fine moderate gale from south-east to east-by-north: but at day-break the clouds began to fly, and it lightened very much in the east, south-east, and north-east. At sun-rising, the sky looked very red in the east near the horizon, and there were many black clouds both to the south and north of it. About a quarter of an hour after the sun was up, there was a squall to the windward of us; when on a sudden one of our men on the fore-castle called out that he saw something a-stern, but could not tell what: I looked out for it, and immediately saw a spout beginning to work within a quarter of a mile of us, exactly in the wind: we presently put right before it. It came very swiftly, whirling the water up in a pillar about six or seven yards high. As yet I could not see any pendulous cloud, from whence it might come; and was in hopes it would soon lose its force. In four or five minutes time, it came within a cable's length of us, and passed away to leeward, and then I saw a long pale stream coming down to the whirling water. This stream was about the bigness of a rainbow: the upper end seemed vastly high, not descending from any dark cloud, and therefore the more strange to me; I never having seen the like before. It past about a mile to leeward of us, and then broke. This was but a small spout, not strong nor lasting; yet I perceived much wind in it as it passed by us. The current still continued at north-west a little westerly, which I allowed to run a mile per hour.

By an observation the 13th, at noon, I found myself 25' to the northward of my reckoning; whether occasioned by bad steerage, a bad account, or a current, I could not determine; but was apt to judge it might be a complication of all; for I could not think it was wholly the current, the land here lying east-by-south, and west-by-north,



or a little more northerly and southerly. We had kept so nigh as to see it, and at farthest had not been above twenty leagues from it, but sometimes much nearer; and it is not probable that any current should set directly off from a land. A tide indeed may; but then the flood has the same force to strike in upon the shore, as the ebb to strike off from it: but a current must have set nearly along shore, either easterly or westerly; and if any thing northerly or southerly, it could be but very little in comparison of its east or west course, on a coast lying as this doth; which yet we did not perceive. If therefore we were deceived by a current, it is very probable that the land is here disjoined, and that there is a passage through to the southward, and that the land from King William's Cape to this place is an island, separated from New Guinea by some streight, as Nova Britannia is by that which we came through. But this being at best but a probable conjecture, I shall insist no farther upon it.

The 14th we passed by Scouten's Island, and Providence Island, and found still a very strong current setting to the north-west. On the 17th we saw a high mountain on the main, that sent forth great quantities of smoke from its top: this volcano we did not see in our voyage out. In the afternoon we discovered King William's Island, and crowded all the sail we could to get near it before night, thinking to lie to the eastward of it till day, for fear of some shoals that lie at the west end of it. Before night we got within two leagues of it, and having a fine gale of wind and a light moon, I resolved to pass through in the night, which I hoped to do before twelve o'clock, if the gale continued; but when we came within two miles of it, it fell calm; yet afterwards by the help of the current, a small gale, and our boat, we got through before day. In the night we had a very fragrant smell from the island. By morning-light we were got two leagues to the westward of it; and then were becalmed all the morning; and met such whirling tides, that when we came into them, the ship turned quite round: and though sometimes we had a small gale of wind, yet she could not feel the helm when she came into these whirlpools: neither could we get from amongst them, till a brisk gale sprung up; yet we drove not much any way, but whirled round like a top. And those whirlpools were not constant to one place but drove about strangely; and sometimes we saw among them large ripplings of the water, like great over-falls, making a fearful noise. I sent my boat to sound, but found no ground.

The 18th Cape Mabo bore south, distance nine leagues; by which account it lies in the latitude of 50' south, and meridian distance from Cape St. George one thousand two hundred and forty-three miles. St. John's Isle lies forty-eight miles to the east of Cape St. George; which being added to the distance between Cape St. George and Cape Mabo, makes one thousand two hundred and ninety-one meridional parts; which was the furthest that I was to the east. In my outward-bound voyage I made meridian distance between Cape Mabo and Cape St. George, one thousand two hundred and ninety miles; and now in my return, but one thousand two hundred and forty-three; which is forty-seven short of my distance going out. This difference may probably be occasioned by the strong western current which we found in our return, which I allowed for after I perceived it; and though we did not discern any current when we went to the eastward, except when near the islands, yet it is probable we had one against us, though we did not take notice of it because of the strong westerly winds. King William's Island lies in the latitude of 21' south, and may be seen distinctly off Cape Mabo.

In the evening we past by Cape Mabo; and afterwards steered away south-east half-east, keeping along the shore, which here trends south-easterly. The next morning,  
seeing

seeing a large opening in the land, with an island near the south side; I stood in, thinking to anchor there. When we were shot in within two leagues of the island, the wind came to the west, which blows right into the opening. I stood to the north shore; intending, when I came pretty nigh, to send my boat into the opening, and sound, before I would adventure in. We found several deep bays, but no soundings within two miles of the shore; therefore I stood off again. Then seeing a rippling under our lee, I sent my boat to sound on it; which returned in half an hour, and brought me word that the rippling we saw was only a tide, and that they had no ground there.

## ABSTRACT OF CAPTAIN COOK'S FIRST VOYAGE.

*Begun in 1768, and finished in 1771.*

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**A** FEW years after His present Majesty's accession to the throne, he turned his thoughts to voyages of discovery, particularly in the southern hemisphere. Three were made by Captain (now Admiral) Byron, Captain Wallis, and Captain Carteret, at different periods. In consequence of their success, other voyages were thought of upon a more enlarged scale, and carried into execution by Captain Cook, who made three also; in the last of which he unhappily lost his life. Of this a compendium has been already laid before the public; and his two former expeditions are now intended to be given in the same summary manner.

Captain Cook received his commission in the month of May, 1768, and on the 26th of August following, sailed from Plymouth in the *Endeavour*, a vessel of about three hundred tons, which was originally intended for the coal trade.

Mr. Banks, a gentleman of considerable property in Lincolnshire (now Sir Joseph Banks, and President of the Royal Society), and Dr. Solander, a native of Sweden, who had studied under Linnæus, both undertook, from a laudable desire of acquiring knowledge in astronomy and botany, to accompany the captain. The former of these gentlemen was not long returned from a voyage to Newfoundland; his principal object now was to view the transit of Venus. They took two draftsmen with them; one to delineate subjects in natural history, the other landscapes. Mr. Banks had also a secretary and four servants.

Thursday, December 8th, 1768, having procured all necessary supplies, they left Rio de Janeiro. They did not meet with any material occurrence from this time to the 22d, when they were surrounded by great numbers of porpoises, of a singular species, which were about fifteen feet in length, and of an ash colour. On the 23d they observed an eclipse of the moon; and about seven o'clock in the morning a small white cloud appeared in the west, from which a train of fire issued, extending itself westerly; about two minutes after they heard two distinct loud explosions, immediately succeeding each other, like cannon, after which the cloud soon disappeared.

On the 30th they ran upwards of fifty leagues, through vast numbers of land insects, some in the air, and others upon the water; they appeared to resemble exactly the flies that are seen in England, though they were thirty leagues from land, and some of these insects never quit it beyond a few yards.

January 4th, 1769, they saw an appearance of land, which they mistook for Pepy's island; but on their standing towards it, it proved what the sailors call a Fog Bank. On the 14th they entered the strait of Le Maire; but the tide being against them, they were driven out with great violence, and the waves ran so high, that the ship's bowsprit was frequently under water; at length however they got anchorage, at the entrance of a little cove, which Captain Cook called St. Vincent's Bay.

The

The weeds, which here grow upon rocky ground, are very remarkable ; they appear above the surface in eight and nine fathoms water ; the leaves are four feet in length, and many of the stalks, though not more than an inch and a half in circumference, above one hundred. Mr. Banks and Dr. Solander having been on shore some hours, returned with more than a hundred different plants and flowers, hitherto unnoticed by the European botanists.

Sunday 15th, having anchored in twelve fathoms water, upon coral rocks, before a small cove, distant from shore about a mile, two of the natives came down upon the beach, in expectation that they would land ; but this situation affording little shelter, the captain got under sail again, and the natives retired.

About two o'clock they anchored in the bay of Good Success, and the captain went on shore, accompanied by Mr. Banks and Dr. Solander, to search for a watering-place, and confer with the Indians. These gentlemen proceeded about a hundred yards before the captain, when two of the Indians having advanced forward and seated themselves, they rose, upon Mr. Banks and the doctor's coming up, and each of them threw away a small stick, which they had before in their hands ; this they did in such a direction, that the stick flew both from themselves and the strangers, which they meant as a token of peace, and a testimonial of their renouncing weapons ; they then returned briskly towards their companions, who had remained at some distance behind, and made signs to the strangers to advance, which they accordingly complied with. The reception the gentlemen met with was friendly, though the manner was uncouth. The civility was returned, by the distribution of beads and ribbons, with which the Indians were much pleased. After a mutual confidence had been thus established, the rest of the English party joined, and a general conversation, though of a singular kind, ensued. Three of the Indians now returned with the captain and his friends to the ship, whom they clothed with jackets, and gave them bread, jerked beef, &c. part of which they eat, and carried the remainder on shore. They refused to drink rum or brandy, after tasting them, intimating by signs that it burnt their throats. One of them stole the covering of a globe, which he secreted under his cloak. After staying near two hours on board they went on shore. They were of a middle stature with broad flat faces, low foreheads, high cheeks, noses inclining to flatness, wide nostrils, small black eyes, large mouths, small but indifferant teeth, and black straight hair, falling down over their ears and forehead, which was commonly smeared with brown and red paint ; and, like all the original natives of America, they were beardless. Their garments were the skins of guanicos and seals, which they wrapped round their shoulders. The women have a small string tied round each ancle, and wear each a flap of skin round the middle. They carry the children on their backs, and are generally employed in domestic labour and drudgery.

Mr. Banks, Dr. Solander, Mr. Buchan, and several other gentlemen, accompanied by servants, went a considerable way into the country, where they had marshy ground, and very cold blasts of wind and snow, to contend with ; however, after great fatigue, they at last attained a considerable eminence they had in view. Here they found a great variety of plants, that gratified their curiosity, and repaid them for their toil.

It was now near eight o'clock in the evening, and Dr. Solander, who knew from experience that extreme cold, when joined with fatigue, occasions a drowsiness that is not easily resisted, intreated his friends to keep in motion, however disagreeable it might be to them ; his words were, "Whoever sits down, will sleep ; and whoever sleeps, will wake no more." Every one seemed accordingly armed with resolution ;

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but on a sudden the cold became so very intense, as to threaten the most direful effects. It was very remarkable, that Dr. Solander himself, who had so forcibly admonished and alarmed his party, should be the first who insisted upon being suffered to repose. In spite of the most earnest entreaties of his friends, he lay down amidst the snow, and it was with great difficulty they kept the doctor awake. One of the black servants became also weary and faint, and was upon the point of following the doctor's example. Mr. Buchan was therefore detached with a party to make a fire at the first commodious spot they could meet with. Mr. Banks, with four more, remained with the Doctor and Richmond the black, who, with the utmost difficulty, were induced to come on; but after walking a few miles farther, they expressed their inability of proceeding. When the black was informed, that if he remained there he would soon be frozen to death, he replied, that he was so exhausted with fatigue, that death would be a relief to him. Dr. Solander said he was not unwilling to go, but that he must first take some sleep, notwithstanding what he had before declared to the company. Thus resolved, they both sat down, supported by bushes, and in a short time fell fast asleep. Intelligence now came from the advanced party, that a fire was kindled about a quarter of a mile farther on the way. Mr. Banks then waked the doctor, who had almost lost the use of his limbs already, though it was but a few minutes since he sat down; he nevertheless consented to go on. Every measure taken to relieve the black proved ineffectual; he remained motionless, and they were obliged to leave him to the care of the other black servant and a sailor, who appeared to have been the least hurt by the cold, and they were to be relieved, as soon as two others were sufficiently warmed to supply their places. The doctor was with much difficulty got to the fire. Those who were sent to relieve the companions of Richmond, returned in about half an hour without being able to find them. What rendered the mortification still greater was, that a bottle of rum, the whole stock of the party, could not be found, and was judged to have been left with one of the three who were missing. There was a fall of snow which incessantly continued for near two hours, and there remained no hopes of seeing the three absentees again, at least, alive. About twelve o'clock, however, a great shouting was heard at a distance, which gave inexpressible satisfaction to every one present. Mr. Banks and four others went forth and met the sailor, with just strength enough to walk; he was immediately sent to the fire, and they proceeded to seek for the two others. They found Richmond upon his legs, but incapable of moving them; the other black was lying senseless upon the ground. All endeavours to bring them to the fire were fruitless, nor was it possible to kindle one upon the spot, on account of the snow that had fallen, and was still falling, so that there was no alternative, and they were compelled to leave the two unfortunate negroes to their fate, making them, however, a bed of boughs of trees, and covering them very thick with the same.

As all hands had been employed in endeavouring to move the two blacks to the fire, and had therefore been exposed to the cold for near an hour and a half, some of them began to be afflicted in the same manner as those they went to relieve. Briscoe, another of Mr. Banks's servants, in particular, began to lose his sensibility. They at length reached the fire, and there passed the night in a very disagreeable manner. The party that set out from the ship consisted of twelve, of whom two were already judged to be dead; it was doubtful whether a third would be able to return on board; and Mr. Buchan, a fourth, who had but just recovered from fits, seemed threatened with them again. They had wandered so far into the internal parts, that the ship was a long day's

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journey distant, through an unfrequented wood, in which might probably be bewildered till night; and being equipped only for a journey of a few hours, they had not provisions left sufficient to afford the company a single day.

On the 17th, in the morning, at day-break, nothing presented itself to view all around but snow, the trees being equally covered with ice on the ground; and the blasts of wind were so violent and frequent, that their journey was rendered impracticable, and there was much reason to dread perishing with cold and famine. However, at about six in the morning they were flattered with a dash of hope of being delivered, by discovering the sun through the clouds, which greatly diminished. Previous to their setting out, messengers were dispatched to the happy negroes, who returned with the melancholy news of their death.

About ten o'clock in the morning they set out on their journey to the ship, and in about three hours, to their great astonishment and satisfaction, they found themselves upon the shore, much nearer to the ship than their sanguine expectations could have flattered them. When they took a retrospect of their former route from the sea, they found that instead of ascending the hill in a direct line, they had made a circle almost round the country. The congratulations even on board expressed at their return, can better be imagined than expressed.

On the 20th, Mr. Banks and Dr. Solander made a further excursion into the country. After walking for some time, they arrived at a small town, consisting of about a dozen miserable huts, constructed without art or regularity, in the form of a sugar loaf, with a place left open, which answered the double purpose of a door and chimney. Their bows and arrows were constructed with great dexterity and ingenuity: they were made of wood highly polished; and the point, which was either glass or flint, was fitted with much skill. Mr. Banks observed glass and flint amongst them unwrought, with cloth, canvass, rings, buttons, &c. it was therefore judged, that they travelled at times to the north, as no ship had touched at this part of Terra del Fuego for some years.

They did not seem to have any form of government among them, nor did there appear any kind of subordination. These people appeared upon the whole to be the out-casts of human nature, whose lives were passed in a wandering in a forlorn manner over dreary wastes; their only food was shell-fish, and devoid of every convenience arising from the rudest art, or even an implement to dress their food. Such were these people, who nevertheless appeared content; so little does refinement or luxury promote happiness.

The generality of writers, who have described the island of Terra del Fuego, have represented it as covered with snow, and desolate of wood. In this, however, they are evidently mistaken, and their error must be owing to their not having visited it in the winter season, when it possibly is covered with snow. The crew of the Endeavour perceived the sides of the hills clothed with an agreeable verdure. The summit of the hills is barren, but the valleys are rich, and a brook is to be found at the foot of almost every hill; the water has a reddish tinge, but is not ill tasted, and was some of the best the captain took in during his whole voyage.

Thursday, January 26th, Captain Cook weighed anchor, and the weather being very calm, Mr. Banks sailed in a small boat to shoot birds when he killed some shearwaters and albatrosses; the latter were larger than those caught to the north of the strait;

## CAPTAIN COOK'S FIRST VOYAGE.

freight: the sheers were less, and their backs darker coloured. The albatrosses were good eaters.

The surrounding doubling of Cape Horn is represented as a very dangerous passage, and that it is generally thought passing through the freight of Magellan is less so. The Endeavour doubled it with as little danger as the North Foreland on the English coast; the heavens were fair, the wind temperate, the weather pleasant, and the crew near shore had a very distinct view of the coast.

Mr. Banks killed near sixty birds in one day, and he caught two forest flies of the same species, never yet described. He also found a cuttle-fish, which had not been killed by the crew; it was different from the fishes of this name met with in the European seas, have double row of sharp talons, resembling those of a cat, which could be retracted. This fish made excellent soup.

On the 15th, account of a squabble about a bit of seal skin which he had taken in a frolic, but which was represented to his officer as a theft, one of the men, a young fellow about twenty, threw himself overboard, and was drowned.

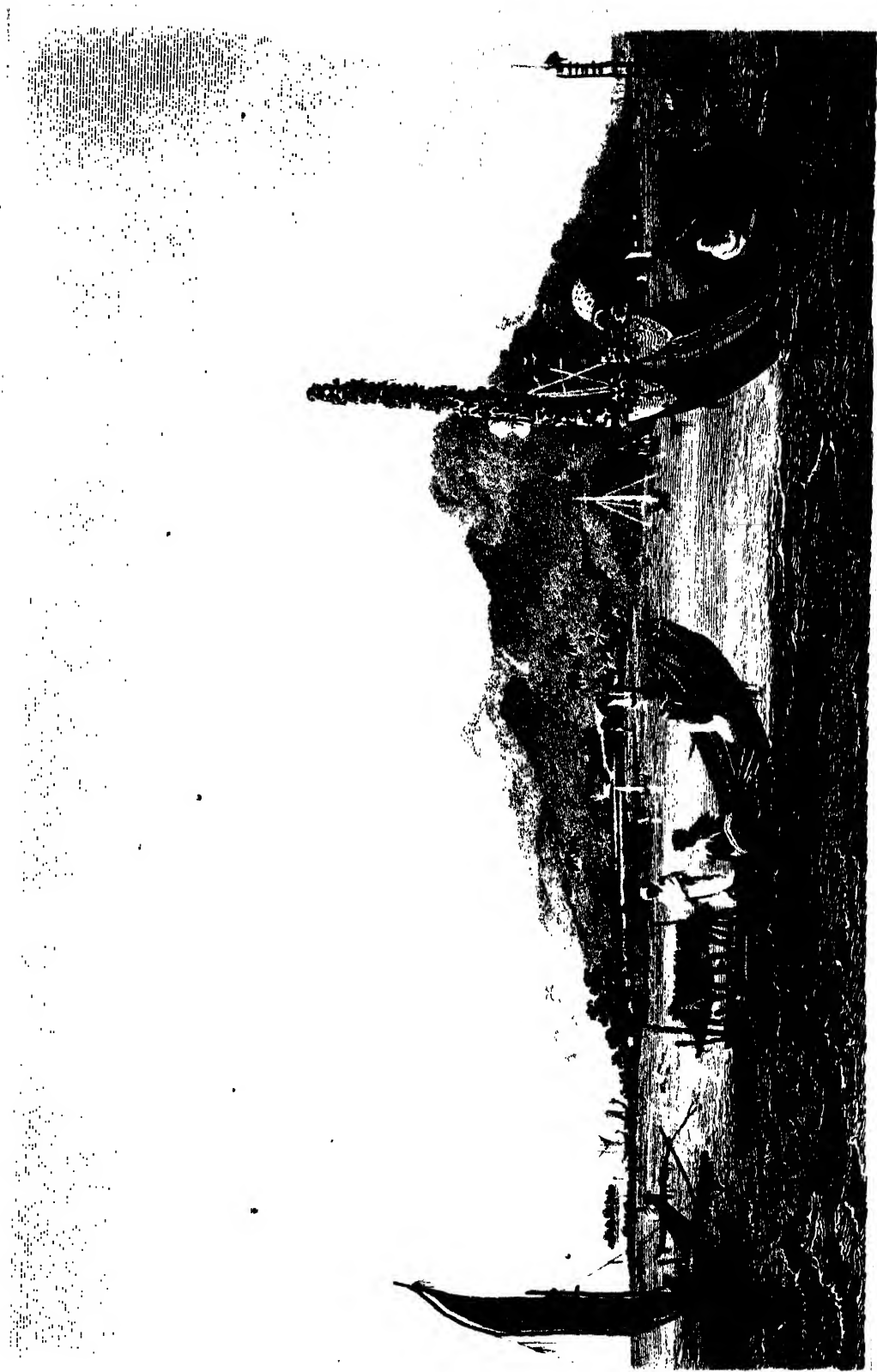
About ten o'clock, Tuer, April 4th, Peter Briscoe, servant to Mr. Banks, discovered land to the south, at three or four leagues distant. The captain immediately sailed up for it, and found it to be an island of an oval form, with a lake or lagoon in the centre, that extended over the greatest part of it; the border of land which surrounded the lake was in many places low and narrow, especially towards the south, where the beach consisted of reef of rocks; three places on the north side had the same appearance. Captain Cook came within a mile on the north side, but though he cast a line of one hundred and fifty fathom, he found no bottom, and could not meet with any anchorage. There were several natives visible on shore; they seemed tall, with remarkable large heads, which might probably be increased by some bandage; their hair was black, and their complexions copper colour. There appeared along the beach, abreast of the ship, some of these inhabitants, with pikes or poles in their hands, which seemed twice the height of themselves. They at this time appeared naked; but when they retired, upon the ship's passing the island, they put on a covering of a light colour.

Captain Cook saw land again in the afternoon to the north-west. He reached it by ten o'clock, when it appeared a low island covered with wood, in form circular, about a mile in circumference. No inhabitants were visible, nor any cocoa-nut trees, though the Endeavour had reached the shore within half a mile; yet the island appeared covered with verdure of various tinges. This island, which is distant from that of Lagoon, about seven leagues north, fifty-two west, the gentlemen on board named it as the Cap.

On the 5th, they discovered to the west a low island, which appeared to be inhabited, and at three o'clock they came within sight of it. This land now seemed divided into two islands, or rather collections of islets, their extent being near nine leagues. The two largest were divided from each other by a strait of near half a mile in breadth.

On the 10th, upon their looking out for the island to which they were destined, they saw land ahead. The next morning it appeared very high and mountainous, and it was known to be King George the Third's Island, so named by Captain Wallis, but by the natives called Otaheite. The calms prevented the Endeavour from approaching it all the morning of the 12th, when a breeze springing up, before eleven o'clock, they were making towards the ship; only a few approached, and the people thought that some of the nearest would not come on board Captain Cook. Each canoe







canoe had in it young plantains, and branches of trees, as tokens of peace and friendship; and they were handed up the sides of the ship by the people in one of the canoes who made signals in a very expressive manner, intimating, that they desired these emblems of pacification should be placed in a conspicuous part of the ship: and they were accordingly stuck among the rigging, at which they testified their approbation. Their cargoes consisted of cocoa-nuts, bananas, bread-fruit, apples and figs, which were very acceptable to the crew, and were then purchased.

In the evening they opened the north-west point, and saw York Island, so named by the crew of the Dolphin. They lay off and on all night, and in the morning of the 13th they entered Port Royal Harbour, in the island of Otaheite, and anchored within half a mile of the shore. A great number of the natives immediately came off in their canoes, bringing with them bananas, cocoa-nuts, bread-fruit, apples, and some hogs, which they bartered with the ship's crew for beads and other trinkets.

The tree that bears the bread-fruit is about the size of the horse chestnut; its leaves are near a foot and a half long, in shape oblong, resembling, in almost every respect, those of the fig-tree; its fruit is not unlike the Cantaloupe melon, either in size or shape; it is inclosed in a thin skin, and its core is as large as a person's thumb; it is somewhat of the consistency of new bread, and as white as the blanched almond; it divides into parts, and they roast it before it is eaten; it has little or no taste. An elderly man, named Owhaw, who was known to Mr. Gore and others, who had visited this island with Captain Wallis, came on board; and as he was considered a useful man, the captain endeavoured to gratify all his enquiries. Captain Cook now drew up several necessary rules for the regulation of traffic with the inhabitants, and ordered that they should be punctually observed.

When the ship was properly secured, the captain went on shore with Mr. Banks and Dr. Solander, a party under arms, and their friend the old Indian. They were received on shore by some hundreds of the natives, who were struck with such awe, that the first who approached crept almost upon his hands and knees. He also presented to them branches of trees, the usual symbol of peace. This symbol was received, on the part of the English gentlemen, with demonstrations of satisfaction and friendship; and noticing, that each of the Indians held one of these branches in his hand, they gathered some, and followed the example of the natives.

They were conducted by the old Indian, accompanied by his countrymen, towards the place where the Dolphin had watered. Here, the ground being cleared, the chiefs of the natives threw down their boughs, and the captain and his companions followed the example, after having drawn up the marines, who, marching in order, dropped their branches upon those of the Indians. When they came to the watering-place, the Indians intimated that they had their permission to occupy that ground, but it was not suited to their purpose. In the course of this walk, and a circuit through the woods, the Indians had got rid of their timidity, and became familiarized. On the way they received beads and other small presents, at which they expressed great pleasure.

The whole circuit was near four miles, through groves, consisting of trees of cocoa-nuts and bread-fruit; beneath which trees were the habitations of the natives, consisting of only a roof, destitute of walls. In this peregrination the gentlemen were not a little disappointed at finding very few fowls or hogs. Captain Cook was informed by such of the party as had been here with the Dolphin, that none of the people hitherto seen were of the first rank, and they imagined the Queen's residence was moved, no traces remaining of it. Next morning, before they left the ship, several canoes came about her, filled with people, whose dress denoted them of the superior class: two of

He came on board, and each of them fixed upon a friend: one of them chose Mr. Banks, and the other Captain Cook. The ceremony consisted of taking off their clothes in great part, and putting them upon their adopted friends. This compliment was returned, by presenting them some trinkets. They then made signs for these gentlemen to go with them to the place of their abode; and the captain being desirous of meeting with a more convenient harbour, and knowing more of the people, readily assented. Accordingly the captain, Mr. Banks, Dr. Solander, with the Indians and other friends, got into two boats. About three miles distance they landed, among several hundreds of the natives, who conducted them to a large house. Upon their entrance they saw a middle-aged man, named Tootahah, who, as soon as they were seated, ordered a cock and hen to be produced, which he presented to Mr. Banks and the captain, as well as a piece of perfumed cloth; which compliment was returned by a present from Mr. Banks. They were then conducted with great civility to several large houses, constructed in the same manner as those already described; the ladies, so far from shunning, invited, and even pressed them to be seated. Whilst they were afterwards walking along the shore, they met, accompanied by a great number of natives, another chief, named Tubora Tunnaida, with whom they settled a treaty of peace, in the manner before described. Tubora Tunnaida intimated, he had provisions for them if they chose to eat, and they accordingly dined heartily upon bread-fruit, plantains, and fish.

In the course of this visit, Tomio, the wife of the chief, placed herself upon the same mat with Mr. Banks, close by him; but she not being young, nor appearing ever to have possessed many charms, to these causes may be ascribed the little attention this gentleman paid her; and Tomio received the additional mortification of Mr. Banks's beckoning to a pretty girl, who, with some reluctance, came and seated herself by him. The Princess was somewhat mortified at the preference given to her rival, nevertheless she continued her assiduities to him. This whimsical scene was interrupted by an event of a serious nature. Dr. Solander having discovered that he had lost an opera-glass, he complained to the chief, and interrupted the convivial party. This complaint was enforced by Mr. Banks's starting up and striking the butt-end of his moutquet on the ground, which struck the Indians with a panic, and they all precipitately ran out of the house, except the chief, and a few others of the superior class.

The chief appeared much concerned at this accident, and gave us to understand, with an appearance of great probity, that he would endeavour if possible to have the glass recovered; but that if this could not be done, he would make the doctor compensation, by giving him as much new cloth, of which he shewed large quantities, as should be thought equal to its value. The case however was in a little time brought, and the glass itself soon after. After this adventure was amicably terminated, they returned to the ship about six o'clock in the evening.

Saturday the 15th, in the morning, several of the chiefs, one of whom was very corpulent, came on board, bringing with them hogs, bread-fruit, and other refreshments; in exchange they gave them hatchets, linen, beads, and other trinkets; but some of them took the liberty of stealing the top of the lightning chain. This day the captain, attended by Mr. Banks and some of the other gentlemen went ashore to fix on a proper spot to erect a small fort for their defence during their stay on the island; and the ground was accordingly marked out for that purpose, a great number of the natives looking on all the while, and behaving in the most peaceable and friendly manner.

Mr. Banks went a shooting in the woods, some marines and a petty officer being appointed to guard the tent in the interim; several of the natives accompanied the gentlemen

gentlemen in this excursion. Upon crossing a little river Mr. Banks perceiving some ducks, fired, and killed three. The Indians were struck with the utmost terror at this event, which occasioned them to fall suddenly to the ground, as if they had been shot at the same time; they recovered, however, presently from their fright, and continued their march. Before this party had gone much further, they were alarmed by the discharge of two pieces, fired by the tent-guard. Owhaw, after calling together the captain's party, dispersed all the Indians except three, who broke branches of trees, as pledges of their fidelity. Upon their return to the tent, it appeared, that an Indian had taken an opportunity to snatch away one of the sentinel's musquets; whereupon a young midshipman, under whose command the party was, very imprudently ordered the marines to fire, which they did immediately amongst the thickest of the fugitive Indians, in number above a hundred, several of whom were wounded; but as the criminal did not fall, they pursued and shot him dead.

When Mr. Banks heard of the affair, he was greatly displeased with the guard, and he used his utmost endeavours to accommodate the difference; and through the mediation of an old man, prevailed on many of the natives to come over to them, bringing plantain-trees, their usual signal of peace, and clapping their hands on their breasts, they cried *Tyan*, which signifies friendship.

Few of the natives appeared next morning upon the beach, and not one of them came on board. From hence Mr. Banks and the other gentlemen concluded, that their apprehensions were not entirely removed, more especially as even Owhaw had forsaken them. The captain, in consequence of these disagreeable appearances, brought the ship nearer to shore, and moored her so as to make her broadside bear on the spot which had been marked for erecting the fort. The captain went on shore in the evening, with some of the gentlemen, when the Indians assembled round them, and they trafficked together in a friendly manner.

The fort began to be erected on the 18th. Some of the company were employed in throwing up intrenchments, whilst others were occupied in cutting fascines and pickets, which the Indians of their own accord cheerfully assisted in bringing from the woods. Three sides of the fort were fortified with intrenchments and palisades; and on the other, which was flanked by a river, the water-casks being filled, were placed so as to form a breast-work.

This day the natives brought down such quantities of bread-fruit and cocoa-nuts, that it was necessary to reject them, and to intimate to them, that the company would not want any for two days. Beads were trafficked this day for every thing. Mr. Banks's tent being got up, he, for the first time, slept on shore. No Indian attempted to approach it the whole night; however, a precaution had been taken to place proper sentinels about it.

Mr. Monkhouse, the surgeon, said he had seen, in his evening walk, the body of the man who had been shot at the tent. It was deposited in a shed, close to the house where he had resided when alive. The corpse was placed on a bier, the frame of which was wood, with a matted bottom, supported by posts about five feet high. The corpse was covered with a mat, and over that a white cloth; by its side lay a wooden mace, and towards the head two cocoa-nut shells; towards the feet was a bunch of green leaves and small dried boughs, tied together and stuck in the ground, near which was a stone the size of a cocoa-nut: here was also placed a young plantain-tree and a stone axe. The natives seemed displeased at his approaching the body.

They had a specimen of the music of the country on the 22d; some of the natives performing on flutes, which had only two stops; they were blown like the German  
VOL. XI. 3 T flute,

flute, but the performer blew with his nostril instead of his mouth : several others sung, only one tune, to this instrument.

Some of the Indians brought the English axes to grind and repair, most of which they had received from the Dolphin ; but a French one occasioned much speculation, and it at length appeared to have been left here by M. de Bougainville.

On the 25th, several knives belonging to the officers were missing ; upon which Mr. Banks, who had lost his among the rest, accused one of the chiefs with having stolen it, which caused him to be very unhappy, as he happened to be innocent of the fact, Mr. Banks's servant having mislaid it ; and the rest were produced in a rag by a native. This chief was some time before he would forget this accusation, the tears starting from his eyes, and he made signs with the knife, that if he had ever been guilty of such an action, as was imputed to him, he would suffer his throat to be cut. However, in general, these people, from the highest to the lowest, are the greatest thieves in the world.

On the 26th, six swivel-guns were mounted upon the fort, which put the natives into great consternation, and caused several fishermen, who lived upon the point, to remove farther off, imagining they were to be fired at in a few days.

The next day Tubora Tumaida, with a friend, a remarkable glutton, and three of his women, dined at the fort ; after which he set out for his house in the wood. In a short time he returned in much agitation, to acquaint Mr. Banks, that the ship's butcher had threatened to cut his wife's throat, upon her refusing to sell him a stone hatchet, which he had taken a fancy to, for a nail. It clearly appeared he had been culpable, and he was flogged on board, in sight of several Indians. As soon as the first stroke was given they interfered, and earnestly intreated that he might be untied. This being refused, they burst into tears, and shewed great concern.

During the forenoon of this day, canoes were continually coming in, and the tents at the fort were filled with people of both sexes. Mr. Molineux, master of the Endeavour, went on shore, and seeing a woman, whose name was Oberea, he declared she was the person he judged to be the queen of the island, when he came there on board the Dolphin in the last voyage.

The eyes of every one were now fixed on her who had made so distinguished a figure in the accounts that had been given by the first discoverers of this island. The person of the Queen Oberea was of a large make, and tall ; she was about forty years of age, her skin white ; her eyes had great expression and meaning in them ; she had been handsome, but her beauty was now upon the decline. She was soon conducted to the ship, and went on board, accompanied with some of her family. Many presents were made her, particularly a child's doll, which seemed the most to engross her attention. Captain Cook accompanied her on shore ; and as soon as they landed, she presented him with a hog, and some plantains, which were carried to the fort in procession, Oberea and the captain bringing up the rear. They met Tootahah, who, though not king, seemed to be at this time invested with sovereign authority. He immediately became jealous of the Queen's having the doll ; which made them find it necessary to compliment him with one also.

On Saturday 29th, in the forenoon, Mr. Banks paid a visit to Oberea, who was still asleep under the awning of her canoe, whither he went with an intention of calling her up. Upon entering her chamber, to his great surprise, he found her in bed with a handsome young fellow, about five-and-twenty ; upon which he immediately retired with some precipitation, not a little disconcerted at this discovery ; but he was soon given to understand, that such amours were by no means considered scandalous,

and that Obadie, the person found in bed with the Queen, was by every one known to have been selected by her as the object of her lascivious hours. The Queen soon got up and dressed herself to wait upon Mr. Banks.

The next day, Sunday, the 30th, Tomio came running to the tents, and taking Mr. Banks by the arm, to whom they applied in all emergent cases, told him that Tubora Tumaida was dying, owing to something which had been given him to eat by his people, and prayed him to go instantly to him. Accordingly Mr. Banks went, and found the Indian very sick. He was told, that he had been vomiting, and had thrown up a leaf, which they said contained some of the poison which he had taken. Upon examining the leaf, Mr. Banks found it to be nothing more than tobacco, which the Indian had begged of some of their people. He looked up to Mr. Banks, while he was examining the leaf, as if he had not a moment to live. Mr. Banks, now knowing his disorder, ordered him to drink of cocoa-nut milk, which soon restored him to health, and he was as cheerful as ever.

On the 1st of May, Captain Cook produced an iron adze, made in imitation of one of their stone ones, which had been brought home by Captain Wallis, and shewed it to Tootahah, who took such a fancy to it, that notwithstanding he was offered the choice of any of the things that were in his chests, he snatched it up with the greatest eagerness, and would accept of nothing else. The same day a chief, who had dined on board a few days before, accompanied by some of his women, who used to feed him, came on board by himself, and when dinner was on table, the captain helped him to some victuals, thinking upon this occasion he would condescend to feed himself; but he never attempted to eat, and had not one of the servants fed him, he would certainly have gone without his dinner.

In the afternoon they took the astronomical quadrant, with some other instruments, on shore.

On Tuesday, the 2d, having occasion to use the quadrant, to their great astonishment and concern it was missing; this was the more extraordinary, as a sentinel had been posted the whole night within a few yards of the tent in which it had been deposited; and it had never been taken out of the case in which it was packed. Their own people were at first suspected, imagining they might have mistaken the contents for articles used in traffic. They searched the fort and the adjacent places, and a considerable reward was offered, as the loss of this instrument would have rendered it impossible for them to have made the necessary observations respecting the transit, one of the principal objects of their voyage. After every fruitless search had been made, Mr. Banks, accompanied by Mr. Green and some other gentlemen, set out for the woods, where he thought he might gain some intelligence of the robbery, if it had been committed by the natives. In the course of their journey they met Tubora Tumaida, with a few of the natives, who was made by signs to understand, that some of his countrymen had stolen the quadrant, and Mr. Banks insisted upon being conducted to the place where it was concealed. Accordingly, they proceeded together a few miles, and, after some enquiry, Tubora Tumaida received information of the thief, and that he was to be found at a place about four miles distant.

Having obtained from Captain Cook a party of men armed as guards, they proceeded to the spot, and were met by one of Tubora Tumaida's own people, with part of the quadrant; soon afterwards the box in which it had been packed, containing the other parts of it, was recovered. It had received no material injury, though taken to pieces.



On Wednesday the 3d, in the morning, Mr. Banks and Dr. Solander attended as usual to purchase provisions, but the Indians brought nothing to market; nor could they procure any from some fishing-boats which came abreast of the tents, though they were in great want of cocoa-nuts and bread-fruit.

Their provisions now were extremely scarce, and the markets ill supplied. Next day, with some difficulty, Mr. Banks obtained a few baskets of bread-fruit from Tumbora Tumaida in the woods, which were a very seasonable relief. An axe and shirt were sent for this day by Tootahah, in return for his two hogs, which they promised to bring him the next day. If they had not complied with this request, they could have scarcely procured any provisions.

After his sending again early in the morning, on Friday 5th, Mr. Banks and Dr. Solander, with the captain, set out in the pinnace, taking one of Tootahah's people with them. They soon reached Eparre, the place where he dwelt, which was but a few miles to the west of the tents. Upon their arrival, they found great numbers of people upon the shore waiting for them. They were immediately conducted to the chief, whilst the natives shouted round them, *Taio Tootahah*, "Tootahah is your friend." They found him sitting under a tree, and some old men standing round him. As soon as he had made signs for them to sit down, he asked for his axe, which Captain Cook presented to him, with a shirt and a broad cloth garment, with which he seemed greatly pleased; and put the garment on. After eating a mouthful together in the boat, they were conducted to a large area, or court-yard, on one side of his house, where an entertainment was provided for them, consisting of wrestling. The chief sat at the upper end of the area, with several of his principal men on each side of him, by way of judges, from whom the conquerors received applause.

Ten or twelve combatants entered the area, and after many simple ceremonies of challenging each other, they engaged, endeavouring to throw one another by dint of strength; then seizing hold of each other by the thigh, the hand, the hair, or the clothes, they grappled without the least art till one was thrown on his back; this conquest was applauded by some words from the old men, and three huzzas.

A man with a stick, who made way for them when they landed, officiated here as master of the ceremonies, keeping order among the people.

When this entertainment was at an end, they were informed that some hogs and a quantity of bread-fruit were preparing for their dinner; which intelligence was the more agreeable, as their appetites were at this time exceedingly keen. But instead of dining either on shore or on board of the boat, they had the mortification of going as far as the ship, by the desire of the chief.

As soon as the chief was known to be on board the ship, the people brought plenty of bread-fruit, cocoa-nuts, and other provisions to the fort.

On Tuesday 9th, in the forenoon Oborea paid them a visit, accompanied by her favourite Obadee; she presented them with a hog and some bread-fruit.

The forge being now set up, and frequently at work, became not only a new subject of admiration to the Indians, but afforded the captain an additional opportunity of conferring obligations on them, by permitting the smith, during his leisure hours, to convert the old iron, which they were supposed to have procured from the Dolphin, into different kinds of tools.

The natives, after repeated attempts, finding themselves incapable of pronouncing the names of the English gentlemen, had recourse to new ones formed from their own language. Mr. Cook was named Toote; Hicks, Hete; Gore, Toura; Solander, Tolano;

lano; Banks, Opana; Green, Treene; and so on for the greatest part of the ship's crew.

As Mr. Banks was sitting in his boat, trading with them as usual, on Friday the 12th, a very extraordinary ceremony was performed by some ladies who were strangers, to whom the rest of the Indians giving way on each side, and forming a passage, they advanced in procession towards Mr. Banks, to whom they presented some parrots feathers, plantains, and other plants. They then brought a large bundle of cloth, consisting of nine pieces, which being divided into three parcels, one of the women, who appeared to be the principal, stepping on one of the parcels, pulled up all her clothes as high as her waist, and then, with an air of unaffected simplicity, turned round three times. This ceremony she repeated in the same manner on the other two parcels of cloth, and the whole being then presented to Mr. Banks, the ladies went and saluted him; in return for which he made them such presents as he thought would gratify them the most.

The next evening Mr. Banks was under the disagreeable necessity of reprimanding, in very strong terms, Tubora Tumaida, for having the insolence to snatch his gun from him, and firing it in the air; a thing which surprised Mr. Banks greatly, as he imagined him totally ignorant of the use of it. And as their safety depended on keeping them in that state, he told him, with threats, that his touching his piece was the greatest of insults. The Indian made no reply, but set off with his family to his house at Eparre. He being an useful man, Mr. Banks, accompanied by Mr. Molineux, thought fit to go after him, and they found him among a number of people, greatly dejected. However, as Mr. Banks judiciously caused all animosity to cease, they brought him back to supper; after which, the chief and his wife both slept in Mr. Banks's tent. One of the natives, not intimidated by their presence, attempted that very evening to scale the walls of the fort, but was prevented by the sentinel. These Indians could not resist making attempts to steal the iron and iron tools within the works.

On the evening of the 14th, several of the officers were witnesses to an entertainment of a very extraordinary nature, which consisted of the most indecent acts of lewdness. For example, a young fellow cohabited in public with a girl about eleven or twelve years of age, without the least sense of shame: and what is still more extraordinary, Oberea, with several other females of the first rank, were present during the whole time.

On Monday the 15th, Mr. Banks detected Tubora Tumaida in having stolen some nails. Mr. Banks having a good opinion of this chief, was willing to put his fidelity to the test, and several temptations were thrown in his way, among the rest a basket of nails, which proved irresistible. He confessed the fact, and upon Mr. Banks's insisting upon restitution, he declared the nails were at Eparre; this occasioned high words, and at length the Indian produced one of them. He was to have been forgiven upon restoring the rest, but not having resolution to fulfil his engagement, he fled with his furniture and family before night.

On the 17th, one of the natives who came in the morning to steal some casks, it not being the first offence, the sentinel snapped his gun at him, but, it missing fire, he escaped.

On the 27th of May, Tootahah being removed to a place called Atahourou, Mr. Banks, Dr. Solander, Captain Cook, and some others, set out in the pinnace to pay him a visit; after making presents of a few trifling articles, they were invited to stay the night. Mr. Banks having accepted a place in Oberea's canoe, left his companions in order to retire to rest. Notwithstanding the care Oberea took of his clothes, by

by having them in her own custody, they were stolen, with his pistols, powder-horn, and many other things that were in his waistcoat pockets. The alarm was given to Tootahah, who slept in the next canoe, and who went with Oberea in search of the thief, leaving Mr. Banks with only his breeches on, and his musket uncharged. They soon returned, but without success; Mr. Banks thought proper to put up with the loss for the present. He judged it now necessary to get up and try to find his companions; he first went to the hut, where Captain Cook and three of his associates lay, and began to relate his melancholy tale; but instead of receiving much comfort from them, he was told, that they had shared the same fate, having lost their stockings and jackets.

In their return to the boats, they were greatly amused by seeing some Indians swimming for their diversion, amidst a surf which no European boat could have lived in, or the best swimmer in Europe have saved himself from drowning, had he by accident been exposed to its fury.

Some Indians from a neighbouring island, to which Captain Wallis gave the name of Duke of York's Island, informed them of more than twenty islands in the neighbourhood of Otaheite.

They now began to make preparations for observing the transit of Venus, and, from the hints which Captain Cook had received from the Royal Society, he sent out two parties to make observations from different spots, that in case they failed at Otaheite, they might succeed elsewhere; they employed themselves in preparing their instruments, and instructing such gentlemen with the use of them, as were to go out. And on Thursday the 1st of June, the next Saturday being the day of the transit, they sent the long boat to Eimayo, having on board Mr. Gore, Mr. Monkhouse, and Mr. Sporing, a friend of Mr. Banks; each furnished with necessary instruments by Mr. Green. Mr. Banks and several of the Indians went out with this party. Others were dispatched to find out a convenient spot, at such a distance from their principal station, as might suit their purpose.

Those who went to Eimayo in the long boat, after rowing best part of the night, by the help of some Indians on board a canoe, which they hailed, found a proper situation for their observatory upon a rock, which rose out of the water, about one hundred and forty yards from the shore; where they fixed their tents, and prepared the apparatus for the following day's observation.

On Saturday, the 3d, as soon as it was light, Mr. Banks left them to go to the island for fresh provisions. As he was trading with the natives who belonged to Tarrao, the King of the island, His Majesty arrived with his sister, whose name was Nuna, in order to pay him a visit. It being customary among these people to be seated during their conferences, Mr. Banks spread on the ground his Indian cloth turban, that he wore instead of a hat, on which they all sat down. After this the royal present was brought, consisting of a hog, a dog, some cocoa-nuts, bread-fruit, &c. A messenger was dispatched by Mr. Banks for an adze, a shirt, and some beads, and they were presented to His Majesty, who received them with much pleasure. Tubora Tumaida and Tomio, Indians who had gone with Mr. Banks upon the expedition, came from the observatory: Tomio, said to be related to Tarrao, brought him a long nail, and a shirt for Nuna, by way of presents. Mr. Banks returned to the observatory with Tarrao, Nuna, and three beautiful young women, their chief attendants. He shewed them the transit of Venus over the sun, and informed them, that he and his companions had come from their own country solely to view it in that situation.

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The produce of this island, according to the inspection of Mr. Banks, proved to be much the same as that of Otaheite, the people also resembling those of that island; many of them he had seen upon it, who were well acquainted with the value of the trading articles.

Both the parties which were sent out, made their observations with great success. They nevertheless differed in the accounts of the times of the contacts more than might have been imagined.

Mr. Green's account was as follows :

	Hours.	Min.	Sec.	
The first external contact, or first appearance of Venus on } the sun, was	9	25	4	} Morning.
The first internal contact or total immersion was	9	44	4	
The second internal contact, or beginning of the im- } mersion	3	14	8	} Afternoon.
The second external contact, or total immersion	3	32	10	
Latitude of the observatory	17°	15'	29"	
Longitude 149° 32' 30" west of Greenwich.				

While they were viewing the transit of Venus, some of the ship's company broke into one of the store-rooms, and stole a quantity of spike nails. As the circulation of these nails might have been highly detrimental to them, strict search was made, and one of the thieves was detected. He had only a few in his custody; but was however punished with two dozen lashes.

There having been a scarcity of bread-fruit for some days, an enquiry was made of the cause, and the reason the Indians gave was, that there being a great crop, the fruit had been gathered to make a sort of four paste, which the natives call mahie, which, after fermentation, will keep a long time, and supply them in times of dearth.

Complaint was made on Monday, the 12th, to the captain, that the Indians had lost some bows and arrows, and strings of plaited hair; the affair was enquired into, and the fact being well attested, two dozen lashes were inflicted upon the sailors who had stolen them.

An iron coal-rake for the oven being stole in the night of the 14th, and many other things having at different times been taken by the Indians, the captain judged it of some consequence, if possible, to put an end to these practices, by making it their common interest to prevent it. He had already given strict orders that the sentinels should not fire upon them, even if they were detected in the fact. About twenty-seven of their double canoes with sails were just come in with cargoes of fish, which the captain seized, and then gave notice, that unless the rake, and all the other things, which had at different times been stolen, were returned, the vessels should be burnt. The captain had, indeed, no such design, as will appear by the event. The menace produced no other effect than the restitution of the rake, all the other things remaining in their possession. At length the captain thought proper to give up the cargoes, as the innocent natives were in great distress for want of them; and at last, to prevent confusion, from the difficulty of ascertaining to whom the different lots belonged, he promised also to release the canoes.

About this time another event had nearly involved the English in a quarrel with the Indians. The captain having sent a boat on shore to get ballast, the officer not meeting immediately with what he wanted, began to pull down one of their sepulchral buildings; this measure was strenuously opposed by the Indians. Mr. Banks, having received intelligence

intelligence of the affair, repaired to the spot, and the matter was soon amicably terminated, there being stones sufficient found elsewhere.

On the 19th, in the evening, soon after dark, while the canoes were detained by the captain, Oberea the queen, and several of her attendants, paid the gentlemen a visit. She came from Tootahah's palace in a double canoe, and brought with her a hog, bread-fruit, and other presents, among which was a dog; but none of the things that had been stolen; those, she pleaded, had been taken away by her gallant Obadee, for which she had beaten him. She was desirous of sleeping with her attendants in Mr. Bank's tent; but this being refused, she was obliged to pass the night in her canoe.

The next morning the Queen returned to the fort. Two of her attendants were very earnest in getting themselves husbands, in which they succeeded by means of the surgeon and one of the lieutenants. They seemed very agreeable till bed-time, and determined to lie in Mr. Bank's tent, which they accordingly did, till the surgeon having some words with one of them, Mr. Banks thrust her out, and she was followed by the rest, except Otea Tea, who cried for some time, till he turned her out also. This had like to have become a serious affair, a duel being talked of between Mr. Banks and Mr. Monkhouse; but it was happily avoided. Dogs are esteemed here more delicate eating than pork; as those bred to be eaten taste no animal food, but live entirely upon vegetables; and the experiment was tried. Tupia undertook to kill and dress one, which he did, by making a hole in the ground and baking it. It was deemed a very good dish.

They were visited on the 21st, at the fort, by many of the natives, who brought various kinds of presents, and among the rest Oamo, a chief of several districts on the island, whom they had never before seen, who brought with him a hog. This chief was treated with great respect by the natives, and was accompanied by a boy and a young woman. The boy was carried upon a man's back, though he was very able to walk. Oberea and some other of the Indians went out of the fort to meet them, their heads and bodies being first uncovered as low as the waist. This was considered as a mark of respect; they had not noticed it before, but judged it was usually shown to persons of distinguished rank among them. Oamo entered the tent, but the young woman, who was about sixteen, could not be prevailed upon to accompany him, though she seemed to combat with her curiosity and inclination. Dr. Solander took the youth by the hand, and conducted him in; but the natives without, who had prevented the girl's entrance, soon found means to get him out again.

The curiosity of Mr. Banks and the other gentlemen being excited from these circumstances, they made enquiry who these strangers were, and were informed that Oamo was Oberea's husband, but that by mutual consent they had been for a considerable time separated; and that the youth and girl were their offspring. The boy was named Terridiri, and was heir apparent to the sovereignty of the island; and he was to espouse his sister as soon as he had attained the proper age.

Monday, June 26th, early in the morning, the captain set out in the pinnace, accompanied by Mr. Banks, to circumnavigate the island. They failed to the eastward, and in the forenoon they went on shore, in a part of the island under the government of Ahio, a young chief, who had often visited them at their tents. They also found here some other natives of their acquaintance. They then proceeded together to the harbour, wherein M. Bougainville lay when he visited this island, and were shewn the  
ground

ground on which he fixed his tent, and the watering-place. They also met with Orette, a chief, who was their particular friend, whose brother went away with M. Bougainville.

Having taken a survey of this harbour, and a large bay near which it is situated, they proposed going to the opposite side of the bay, but Titubaola, who was their conductor, not only refused to accompany them, but endeavoured to dissuade the captain and Mr. Banks from going, saying, "That country was inhabited by people who were not subjects to Tootahah, and who would destroy them all." This information did not, however, prevent the execution of their design; and upon loading their pieces with ball, Titubaola took courage to go with them. They rowed till it was dark, when they reached a narrow neck of land that divided the island into two peninsulas, which are distinct governments. As they were not yet got into the hostile part of the country, they agreed to spend the night on shore, where they were provided with supper and lodging by Ooratooa, the lady who paid her compliments to Mr. Banks in so remarkable a manner at the fort.

In the morning they pursued their passage for the other government. They landed in a district which was governed by a chief, named Maraitata, the "burying-place of men," and his father was called Pahairedé, "the stealer of boats." Notwithstanding their names were so ominous, they gave the captain and Mr. Banks a very civil reception; furnished them with provisions, and sold them a large hog for a hatchet. The curiosity of the natives was soon excited, and a crowd gathered round the English gentlemen; but they saw only two people whom they knew. They then advanced till they reached the district, which was under the dominion of the principal chief, or king, named Waheatua, who had a son; but it was not known in whose hands the sovereign power was lodged. Having continued their journey along the shore for a considerable way, they at last saw the chief, and with him an agreeable young woman about two-and-twenty, named Toudidde. They were not unacquainted with her name, as they had often heard it mentioned by the natives; and they had great reason to suppose she was the Queen of this peninsula.

In passing through this part of the island, they found it better cultivated, and more improved than any they had hitherto met with; though the houses were but few, and those very small, yet there were a great number of canoes which excelled any they had seen, both in size and workmanship. Notwithstanding the fertility of the country, provision of every kind was very scarce.

Towards the southernmost part of the island they found a good harbour, formed by a reef, and the circumjacent country remarkably fruitful.

They landed again a little further to the east. Mathiabo, the chief, with whom they had no acquaintance, nor had ever seen before, soon came to them, and supplied them with cocoa-nuts and bread-fruit. They purchased a hog for a glass-bottle, which he took in preference to every other thing that was offered him. They saw here a turkey-cock and a goose, which the Dolphin left on the island; they were remarkably fat, and seemed to be greatly admired by the Indians.

A very uncommon sight presented itself in a house near this place; several human jaw-bones were fastened to a board of a semicircular form; they seemed fresh, and had not lost any of their teeth. Mr. Banks could obtain no explanation of this mystery. They quitted this place, and arrived in a bay on the north-west side.

Several canoes came off here with some very beautiful women, who appeared to be desirous of their going on shore, to which they readily assented. They met with a friendly reception from the chief, whose name was Wiverou, who gave directions to some of his people to assist them in dressing their provisions, which were now very

plentiful, and they supped at Wiverou's house, in company with Mathiabo. Part of the house was allotted for them to sleep in, and soon after supper they retired to rest. Mathiabo having obtained a cloak from Mr. Banks, under pretence of using it as a coverlet when he lay down, immediately made off with it, unperceived by that gentleman or his companions. News however of the robbery was soon brought them by one of the natives; in consequence of which intelligence they set out in pursuit of the thief, but had proceeded a very little way before they were met by a person bringing back the cloak, which Mathiabo had given up through fear.

The house, upon their return, was entirely deserted, and about four in the morning the sentinel gave the alarm that the boat was missing. Mr. Banks and the captain were greatly astonished at this account, and ran to the water side; but though the morning was clear and star-light, no boat was visible. Their situation was now extremely terrifying; the party consisting of but four, with a single musket and two pocket-pistols, without a spare ball or a charge of powder. After remaining in this distressful state of anxiety for a considerable time, dreading the advantage the Indians would take of it, to their great joy, the boat, which had been driven away by the tide, returned; and Mr. Banks and his companions no sooner breakfasted than they departed.

This place is situated on the north side of Tiarrabou, the south-east peninsula of the island. It is fertile and populous, and the inhabitants every where behaved with civility. The last district in Tiarrabou, in which they landed, was governed by a chief named Omoe. He wanted a hatchet, but they had not one with them. He would not trade for nails, and they embarked, the chief accompanying them. After going about three miles, the captain met with some of Omoe's people, who had got with them a very large hog. The chief agreed to exchange the hog for a large axe and a nail, and to bring the beast to the fort in Port Royal Bay. This resolution he came to after consulting his wife; and Mr. Banks judged the exchange to be very advantageous to the English, as the hog was a remarkably fine one.

At this place they saw one of the Eatuas, or gods; it was made of wicker work, and resembled the figure of a man; it was near seven feet in height, and was covered with black and white feathers; on the head were four protuberances, which the natives called Tate etc, or little men. Here they took leave of Omoe.

They were now near the district, named Paparra, which was governed by Oamo and Oberea, where they intended to spend the night. Mr. Banks and his company landed about an hour before it was dark, and found that they were both set out to pay them a visit at the fort. They nevertheless slept at the house of Oberea, which, though not large, was very neat; no inhabitant but her father was now in possession of it, who shewed them much civility. They took this opportunity of walking out to a point, upon which they had observed, at a distance, some trees called Etoa, which usually grow on the burial-places of these people. They call these burying-grounds Morai, which are also places of worship. They here saw an immense edifice, which they found to be the Morai of Oamo and Oberea, which was by far the most considerable piece of architecture to be found in the island.

It consisted of an enormous pile of stone-work, raised in the form of a pyramid, with a flight of steps on each side, something after the manner of those little buildings, which are commonly erected in England to place the pillars of sun-dials upon; it was near two hundred and seventy feet long, and about one third as wide, and between forty and fifty feet high.

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The foundation consisted of rock-stones, the steps of coral, and the upper part of round pebbles, all of the same shape and size ; the rock and coral-stones were all squared with the utmost neatness and regularity, and the whole building appeared as compact and firm, as if it had been erected by the best workmen in Europe. As the Indians were totally destitute of iron utensils to shape their stones, as well as mortar to cement them, when they had made them fit for use, a structure of such height and magnitude must have been a work of infinite labour and fatigue.

In the centre of the summit was the representation of a bird, carved in wood ; close to this was the figure of a fish, which was in stone. This pyramid made part of one side of a wide court or square, the sides of which were nearly equal ; the whole was walled in, and paved with flat stones. Within this place grew (notwithstanding it was in this manner paved) several plantains, and trees which the natives call Etoa. At a little distance to the west of this edifice was another paved square, which contained several small stages, called by the natives Ewattas, which appeared to be altars ; upon them they place provisions, as sacrifices to their gods. Mr. Banks afterwards observed whole hogs placed upon these ewattas, or altars.

The inhabitants of the island of Otahete, seem in nothing so desirous of excelling each other as in the grandeur and magnificence of their sepulchres ; and the rank and authority of Oberea was forcibly evinced upon this occasion. The gentlemen of the Endeavour, it has been observed, did not find Oberea possessed of the same power as when the Dolphin was at this place, and they were now informed of the cause. The way from her house to the Morai, was by the sea-side, and they observed, in all places as they passed along, a great number of human bones. Inquiry being made into the cause of this extraordinary sight, they were informed, that about four or five months before Captain Cook's arrival, the inhabitants of Tiarrabou, the peninsula to the south-east, made a descent here, and slew many of the people, whose bones were those that were seen upon the coast : that hereupon Oberea, and Oamo who then held the government for his son, had fled and taken refuge in the mountains ; and that the victors destroyed all the houses, and pillaged the country. Mr. Banks was also informed, that the turkey and goose which he had seen in the district of Mathiabo were among the booty. This afforded a reason for their being found where the Dolphin had little or no correspondence ; and the jaw-bones being mentioned, which had been seen hanging in a house, he was informed, that they had likewise been carried off as trophies, the jaw-bones of their enemies being considered by the natives of this island as marks of triumph equally as great as scalps are by the Indians in North America.

On Friday, the 30th, they arrived at Otahourou, where their old acquaintance Tootahah resided ; he received them with great civility, and provided for them a good supper, and a convenient lodging ; and notwithstanding they were so shamefully plundered the last time they slept with this chief, they spent the night in the utmost security, none of their clothes, or any other article, being missing in the morning.

On Saturday, July 1st, they returned to the fort at Port Royal harbour ; having discovered the island, both peninsulas included, to be about one hundred miles in circumference.

Their Indian friends crowded about them upon their return, and none of them came without provisions.

Monday, the 3d, Mr. Banks made an excursion, with some Indian guides, to trace the river up the valley to its source, and observe to what extent its banks were inhabited. After meeting with houses for the space of six miles, they came up to one which was said to be the last that could be seen. The master of it presented them with

cocoa-nuts and other fruits ; and after a short visit, they continued their walk. In this tour they often passed under vaults, formed by rocky fragments, in which, they were informed, that those who were benighted often took refuge. During this tour he had a fine opportunity of searching for minerals among the rocks, which were almost on all sides naked ; he found, however, not the smallest appearance of any kind of mineral. The stones, every where resembling those of Madeira, gave manifest signs of having been burnt. There are also evident traces of fire in the clay upon the hills, both of this and the neighbouring islands.

Mr. Banks was engaged the 4th in planting on each side of the fort a great quantity of the seeds of water-melons, oranges, lemons, limes, and other plants and trees which he had brought from Rio de Janeiro. He gave of these seeds to the Indians in great plenty, and planted many of them in the woods : some of the melon-seeds, which had been planted soon after his arrival, had already produced plants, which appeared to be in a very flourishing state.

Preparations were now made for departing. On Friday the 7th, the carpenters were ordered to take down the gates and pallisadoes of the fort, to be converted into fire-wood on board the Endeavour, and one of the Indians stole the staple and hook belonging to the gate ; he was instantly pursued, but could not be found ; and soon after this, their old friend Tubora Tumaida brought back the staple.

They continued on the 8th and 9th to pull down the fort, and their friends still visited them.

Captain Cook hoped now to quit the island without any farther misunderstanding with the natives ; but in this he was mistaken. Two foreign sailors having been out, one of them was robbed of his knife, and striving to recover it, the Indians attacked and wounded him in a dangerous manner with a stone ; his companion also received a slight wound in the head. As Captain Cook would have been unwilling to have taken farther notice of the transaction, he was not sorry the offenders had made their escape. Another affair equally disagreeable soon after happened. Between the 8th and 9th in the evening, two young marines retired secretly from the fort, and in the morning were not to be met with. Notice having been given for all the company to go on board the next day, and that the ship would sail that day or the day ensuing, Captain Cook began to fear that the marines intended to remain on shore. He was apprised, that no effectual steps could be taken to recover them, without risking the harmony and good fellowship which at present subsisted between the English and the natives ; and therefore resolved to wait a day in hopes of their returning.

The 10th, in the morning, the marines not being returned, an enquiry was made after them, when the Indians declared they did not propose returning, having taken refuge in the mountains where it was impossible to discover them, and that each had taken a wife. In consequence of which it was intimated to several chiefs who were in the fort with their women, among whom were Tubora Tumaida, Tomio and Oberea, that they would not be suffered to quit it till the deserters were produced. Captain Cook thought this precaution necessary, as, by concealing them a short time, he might be compelled to go without them. They received the intimation with very little signs either of fear or discontent, assuring the captain that the marines should be sent back. In the interim he sent Mr. Hicks in the pinnace to bring Tootahah on board the ship, which he executed without giving any alarm. Night coming on, Captain Cook judged it was not prudent to let the people, whom he had detained as hostages, remain at the fort, and he therefore ordered Tubora Tumaida, Oberea, and some others, to be brought on board. This gave an unusual alarm, and several of them, especially the females

females, testified their apprehensions with great agitation of mind, and floods of tears, when they were coming on board. Captain Cook went on board with them, Mr. Banks remaining on shore with some others, whom he thought it of less importance to detain.

One of the marines was brought back in the evening by some of the Indians, who reported, that the other, and the two people who were sent to fetch them back, would be detained whilst Tootahah was confined. Mr. Hicks was immediately dispatched in the long-boat, with several men, to rescue the English prisoners; at the same time Captain Cook told Tootahah, that it was incumbent on him to assist them with some of his people, and to give orders, in his name, that the men should be set at liberty, for that he should expect him to answer for the event. Tootahah immediately complied, and this party recovered the men without any opposition. About seven in the morning, on the 11th, they returned, but without the arms, which had been taken from them when they were made prisoners: the arms were however brought on board soon after, and the chiefs were allowed to return on shore.

At the time the chiefs were set on shore from the ship, those at the fort were also released, and after remaining with Mr. Banks about an hour and a half, they all returned to their respective places of residence. When the deserters were examined, it was discovered that the account which the Indians had given was no way false: they had become fond of two girls, and it was their design to keep themselves concealed till the ship had set sail, and continue upon the island.

Tupia, whose name had been often mentioned in this voyage, had been prime minister of Oherea, when she was at the pinnacle of her authority; he was also the principal priest of the island, and therefore intimately acquainted with the religion of the country. He was likewise deeply versed in navigation, and was thoroughly acquainted with the number, situation, inhabitants, and produce of the adjacent islands. He had often testified a desire to go with them; and on Wednesday the 12th, in the morning, he came on board, with a boy about twelve years of age, his servant, named Taiyota, and requested the gentlemen on board to let him go with them. As it was thought he would be useful to them in many particulars, they unanimously agreed to comply with his request. Tupia then went on shore, for the last time, to see his friends, and took with him several baubles to give them, as parting tokens of remembrance.

Thursday the 13th of July, the ship was visited by a multitude of the gentlemen's friends, and surrounded by numberless canoes, which contained the inferior natives. They weighed anchor about twelve, and the Indians took leave of the gentlemen on board, weeping in a friendly and affecting manner. Tupia supported himself in this scene with a becoming fortitude; tears flowed from his eyes, 'tis true, but the effort that he made to conceal them, did him additional honour. He went with Mr. Banks to the mast-head, where he continued waving his hand to the canoes as long as they remained visible.

According to Tupia's account, the island could furnish above six thousand fighting men, whereby a computation of the number of inhabitants may easily be made.

The produce of Otaheite is bread-fruit, cocoa-nuts, bananas, plantains; a fruit not unlike an apple, potatoes, yams, cocoas, sugar-cane, and a variety of other fruits and vegetables.

They have no European fruits, garden stuff, or pulse, nor grain of any species. Their tame animals are hogs, dogs, and poultry; there is not a wild animal in the island, except ducks, pigeons, parroquets, and a few other birds; rats being the only quadruped;

quadruped ; and there are no serpents. The sea, however, supplies them with great variety of excellent fish.

With regard to the people, they are in general rather of a larger make than Europeans. The males are tall, robust, and finely shaped. The females of the superior class are likewise generally above our common size ; but those of the lower rank are rather below it, and some of them are remarkably little.

Their natural complexion is a fine clear olive, or what we call brunette ; their skin is delicately smooth and agreeably soft. The shape of their faces is in general handsome, and their eyes are full of sensibility and expression ; their teeth are likewise remarkably white and regular, and their breath intirely free from any disagreeable smell ; their hair is, for the most part, black. Both sexes always eradicate the hair from their arm-pits, and they often reproached the English gentlemen with a want of cleanliness for not making use of the same method. Their motions are easy and graceful, but not vigorous ; their deportment is generous and open, and their behaviour affable and courteous.

Both sexes frequently wear a piece of cloth of the manufacture of the island tied round their heads in the form of a turban ; and the women take no little pains in plaiting human hair into long strings, which being folded into branches, are tied on their foreheads by way of ornament.

They stain their bodies, by indenting or pricking the flesh with a small instrument made of bone, cut into short teeth ; which indentures they fill with a dark blue or blackish mixture, prepared from the smoke of an oily nut, burnt by them instead of candles, and water ; this operation, which is called by the natives *tattaowing*, is exceedingly painful, and leaves an indelible mark on the skin. It is usually performed when they are about ten or twelve years of age, and on different parts of the body ; but those which suffer most severely are the breech and the loins, which are marked with arches, carried one above another a considerable way up their backs.

At the operation of *tattaowing*, performed upon the posteriors of a girl about twelve years of age, Mr. Banks was present ; it was executed with an instrument that had twenty teeth, and at each a stroke, which was repeated every moment, serum mixed with blood issued. She bore it with great resolution for several minutes ; but at length the pain became so violent, that she murmured and complained, and then burst into the most violent lamentations ; but her operator was inexorable, whilst some females present chid and even beat her. Mr. Banks was a spectator for near an hour, during which time it was performed only on one side, the other having undergone the ceremony some time before ; and the arches upon the loins, which are the most painful, but upon which they the most pique themselves, were yet to be made.

They clothe themselves in cloth and matting of various kinds ; the first they wear in fair, the latter in wet weather. They are in different forms, no shape being preserved in them ; nor are the pieces sewed together. The women of a superior class wear three or four pieces ; one, which is of considerable length, they wrap several times round their waists, and it falls down to the middle of the leg. Two or three other short pieces, with a hole cut in the middle of each, are placed on one another, and their heads coming through the holes, the long ends hang before and behind, both sides being open, by which means they have the free use of their arms.

The men's dress is very similar, differing only in one instance, which is that part of the garment instead of falling below the knees, is brought between the legs. This dress is worn by all ranks of people, the only distinction being quantity in the superior

superior class. At noon both sexes appear almost naked, wearing only the piece of cloth that is tied round the waist.

The boys and girls go quite naked; the first till they are seven or eight years old; the latter till they are about five. Their houses they seldom use but to sleep in, or to avoid the rain, as they eat in the open air, under the shade of a tree. Their clothes serve them at night for covering, and there are no divisions or apartments. The master and his wife repose in the middle, then the married people; next to these the unmarried females, and at a small distance the men who are unmarried; and the servants sleep in the open air in fair weather. The houses of the chiefs, however, differ in some degree; there are some very small, and so built as to be carried in canoes: all sides of them are inclosed with the leaves of the cocoa-nut; the air, nevertheless, penetrates; in these the chief and his wife alone sleep. There are also houses which are general receptacles for the inhabitants of a district. These are much larger.

When a chief kills a hog, which is but seldom, he divides it equally among his vassals; dogs and fowls are more common.

When the bread fruit is not in season, they are supplied by cocoa-nuts, bananas, plantains, &c.

Their cookery is confined to baking, and their drink is generally water, or the milk of the cocoa-nuts, though there were instances in which some of them drank so freely of the English liquors, as to become quite intoxicated; this, however, seemed to proceed more from ignorance than design, as they were never known to repeat a debauch of this kind a second time. They were told, indeed, that the chiefs sometimes became inebriated by drinking the juice of a plant called *Ava*, but of this they saw no instance during the time they remained on the island.

The chiefs generally eat alone, unless when visited by a stranger, who is sometimes permitted to become a second in their mess; having nothing to supply the want of a table, they sit on the ground in the shade; leaves of trees being spread before them, serve as a table cloth; their attendants, who are numerous, having placed a basket before the chiefs, containing their provisions, and a cocoa-nut shell of fresh and salt water, seat themselves round them; they then begin by washing their mouth and hands, after which they eat a mouthful of bread-fruit and fish, dipt in salt water alternately, till the whole is consumed, taking a sup of salt water likewise between almost every morsel. The bread-fruit and fish being all eaten, they next have either plantains or apples, which they never eat without being pared. During this time a soft paste is prepared from the bread-fruit, which they sup out of a cocoa-nut shell; this finishes the meal, and the hands and mouth are again washed, as at the beginning.

It is astonishing how much food they eat at a meal. Mr. Banks and some other gentlemen were present when one man devoured three fish the size of a middling carp, four bread-fruits as large as a common melon, thirteen or fourteen plantains seven or eight inches long, and above half as big round, and about a quart of the paste made of bread-fruit.

It is not a little surprising, that the inhabitants of this island, who seemed exceedingly sensible of the pleasures of society, should have an universal aversion to the least intercourse with each other at their meals; and so rigid are they in the observance of this unusual custom, that even brothers and sisters have their separate baskets to contain their provisions, and generally sit some yards distance when they eat, with their backs turned towards each other, not exchanging a single word during the whole time of their repast; the middle aged of superior rank usually betake themselves to sleep after dinner, but what is remarkable, the older people are not so lazy; music, dancing, wrestling, and

and shooting with the bow, or throwing a lance, constitute a chief part of their diversions.

Flutes, which have been mentioned before, and drums, are the only musical instruments among them; their drums are formed of a circular piece of wood, hollow at one end only, which is covered with the skin of a shark, and they are beaten with the hand instead of a stick. Their songs are extempore, and frequently in rhyme, but consist of only two lines.

Among their other amusements they have a dance named Timorodee, which is performed by ten or a dozen young females, who put themselves into the most wanton attitudes that can possibly be imagined, keeping time during the performance with the greatest nicety and exactness; from these dances the women are immediately excluded on their becoming pregnant.

Many of the principal people of this island, of each sex, have united into an association, in which no woman confines her favours to any particular man; in this manner they obtain a perpetual variety, no one object ever gratifying them but a few days.

The societies are named Arreoy, the members of which have meetings where the men amuse themselves by wrestling; and notwithstanding the frequent intercourse which the women have with a variety of men, they dance the Timorodee in such a manner as they imagine will most excite the desires of the male sex, and which are often gratified upon the spot. There are much worse practices. In case any of the women prove with child, which in this manner of life seldom happens, they destroy the helpless infant as soon as it is brought into the world, that it may not be a burden to the father, nor interrupt the mother in the pursuit of her lascivious amusements. Natural affection, however, for the child, sometimes happily produces a reformation in the mother; but when this happens the child's life is always forfeited, unless the mother can procure a man to adopt it as his child, in which case this inhuman murder is prevented; but both the man and woman are for ever expelled the society. The woman being particularized by the appellation of Whannownow, "bearer of children," which among these people, is considered as a term of the greatest reproach.

Their personal cleanliness is an object that merits peculiar attention. Both sexes never omit to wash with water three times a day; when they rise, at noon, and before they go to rest. They also keep their clothes extremely clean; so that in the largest communities no disagreeable effluvia ever arises, [nor is there any other inconvenience than heat.

The chief manufacture of Otaheite is cloth; of this cloth there are three different sorts, which are made of the bark of as many different trees, viz. the mulberry, the bread-fruit, and a tree not very unlike the wild fig-tree, which is found in some parts of the West-Indies. The mulberry-tree, which the Indians call Aouta, produces the finest cloth, which is seldom worn but by those of the first rank. The next sort, which is worn by the lower class of people, is made of the bread-fruit tree, and the coarsest of the tree resembling the fig-tree. This last sort, though more useful than the two former, on account of its keeping out water, which neither of the others will, is exceedingly scarce, being manufactured but in small quantities.

The cloth becomes exceedingly white by bleaching, and is died of a red, yellow, brown, or black colour; the first of which is exceedingly beautiful, and equal, if not superior, to any in Europe.

Matting of various kinds is another considerable manufacture, in which they excel, in many respects, the Europeans. They make use of the coarser sort to sleep on, and in wet weather they wear the finer.

They

They greatly excel in the basket and wicker-work ; both men and women employ themselves at it, and can make it of a great number of different patterns.

Their fishing-lines are esteemed the best in the world, made of the bark of the *erowa*, a kind of nettle which grows on the mountains ; they are strong enough to hold the heaviest and most vigorous fish, such as bonetas and albicores ; in short, they are extremely ingenious in every expedient for taking all kinds of fish.

The tools which these people make use of for building houses, constructing canoes, hewing stone, and for felling, cleaving, carving, and polishing timber, consist of nothing more than an adze of stone and a chissel of bone, most commonly that of a man's arm ; and for a file or polisher, they make use of a rasp of coral, and coral sand.

The blades of their adzes are extremely tough, but not very hard ; they make them of various sizes, those for felling weigh six or seven pounds ; and others which are used for carving, only a few ounces ; they are obliged every minute to sharpen them on a stone, which is always kept near them for that purpose.

Some of their smaller boats are made of the bread-fruit-tree, which is wrought with much difficulty, being of a light spongy nature. Instead of planes, they use their adzes with great dexterity. Their canoes are all shaped with the hand, the Indians not being acquainted with the method of warping a plank.

They are very curious in the construction of their boats, the chief parts or pieces whereof are formed separately without either saw, plane, chissel, or any other iron tool, which renders their fabrications more surprising and worthy observation. They keep these boats with great care in a kind of shed, built on purpose to contain them.

Their language is soft and musical, abounds with vowels, and is easy to be pronounced. But whether it is copious, Mr. Banks and Dr. Solander were not sufficiently acquainted with it to know. As very few either of their nouns or verbs are declinable, it must consequently be very imperfect. They found means, however, to be mutually understood without much difficulty.

Here the management of the sick falls to the lot of the priests, and their method of cure consists chiefly of prayers and ceremonies, which are repeated till the patients recover or die.

From their connection with the Europeans, they have entailed upon themselves that dreadful curse, the venereal disease ; which, upon enquiry, evidently appeared to have been brought among them by the vessels under the command of M<sup>rs</sup>. Bougainville. It was called by a name somewhat similar in meaning to rottenness, but of a much stronger import : and they gave a most shocking account of the sufferings of those who were first infected with it ; telling them, that their nails and hair fell off, and the flesh even rotted from their bones : and so greatly were they terrified at the dreadful effects of this alarming disease, that the infected person was forsaken even by his own relations, and left to perish by himself, in such a state of misery and pain as he had never before experienced.

The religion of these people appeared to be exceedingly mysterious.

They emphatically stile the Supreme Being, the Caufer of Earthquakes, but their prayers are more generally addressed to Tane, supposed to be a son of the first progenitors of nature.

They believe in the existence of the soul in a separate state, and that there are two situations, differing in their degrees of happiness, which they consider as receptacles for different ranks, but not as places of reward and punishment ; they suppose that their chiefs and principal people will have the preference to those of inferior rank, as



they imagine their actions no way influence their future state, and that their deities take no cognizance of them whatsoever.

The office of priest is hereditary ; there are several of them, and of all ranks ; the chief is respected next to their Kings, and they are superior to the rest of the natives not only in point of divine knowledge, but also in that of navigation and astronomy.

The priests here are no way concerned with the ceremony of marriage, it being a simple agreement between the man and woman ; and when they chuse to separate, it is done with as little ceremony as that of their marriage.

Slings, with which they are very dexterous, pikes headed with stone, and long clubs made of wood, remarkably hard and heavy, constitute their weapons.—With these they fight with great obstinacy and cruelty, giving no quarter to either man, woman, or child, if they fall into their hands in time of battle.

There is nothing among them substituted for money, or a general medium, by which every object may be purchased or procured ; neither can any permanent good be unlawfully obtained by force or fraud : and the general commerce with women sets aside almost every excitement for committing adultery. In a word, in a government so little polished, though distributive justice cannot be regularly administered, as there can at the same time be but few crimes for the exercise of it, the want of this justice is not so severely felt as in civilized countries.

Thursday, July the 13th, after leaving the island of Otaheite, they sailed with a gentle breeze and clear weather ; and were informed by Tupia, that four islands, which he called Huaheine, Ulietea, Otaha, and Bolabola, were at the distance of about one or two days sail, and that hogs, fowls, and other refreshments, which had lately been scarce, were to be got there in abundance. They accordingly steered their course in search of these islands, and on Saturday the 15th, discovered the island of Huaheine ; and on the 16th, in the morning, they founded near the north-west part of the island, but found no bottom with seventy fathom. Several canoes immediately put off, but they appeared fearful of coming near the ship, till they saw Tupia, who totally removed their apprehensions, and they ventured to come along-side ; and upon assurances of friendship, the King of Huaheine and his Queen went on board. Astonishment was testified by Their Majesties at every thing that was shewn to them ; yet they made no researches, and appeared satisfied with what was presented to their observation, making no inquiry after any other objects, though it was reasonable to suppose, that a building of such novelty and extent as the ship must have afforded many curiosities. The King, whose name was Oree, made a proposal to exchange names with Captain Cook, which was readily assented to. The custom of exchanging names is very prevalent in this island, and is considered as a mark of friendship. They found the people here nearly similar to those of Otaheite in almost every circumstance, except, if Tupia might be credited, they were not addicted to thieving. Having come to an anchor in a small but fine harbour, on the west side of the island, Captain Cook went ashore, accompanied by Mr. Banks and some other gentlemen, with Tupia and the King. The instant they landed, Tupia uncovered himself as low as his waist, and desired Mr. Monkhouse to follow his example. Being seated, he now began a speech, which lasted about twenty minutes ; the King, who stood opposite to him, answering in what seemed to be set replies. During this discourse, he delivered at different times a handkerchief, a black silk neckcloth, some beads and plantains, as presents to their Eatua, or deity. He received in return, for the Eatua of the English, a hog, some young plantains, and two bunches of feathers, which were carried on board. These ceremonies were considered

sidered as a kind of ratification of a treaty between the English and the King of Huaheine.

They went on shore again on the 18th without Tupia, but his boy, whose name was Tayota, accompanied them; with some difficulty they negotiated for eleven pigs, and were not without hopes of obtaining more the next morning.

Wednesday the 19th, they carried some hatchets with them, with which they procured three very large hogs. As they proposed to sail in the afternoon, the king, accompanied by some others of the natives, came on board to take his leave, when His Majesty received from Captain Cook a small pewter plate, with the following inscription: "His Britannic Majesty's ship Endeavour, Lieutenant Cook, Commander, 16th July, 1769." He also was presented with some medals, or counters, resembling the coin of England, and a few other trifles.

This island is distant from Otaheite about thirty leagues, and is about twenty miles in circumference. Mr. Banks found here a species of scorpion which he had not seen before. The people are of a very lazy disposition, though they are stouter and larger made than those of Otaheite.

From Huaheine they sailed for the island of Ulietea, and in the afternoon came within a league or two of the shore. They anchored in a bay, which is formed by a reef, on the north side of the island; two canoes of natives soon came off from the shore, and brought with them two small hogs, which they exchanged for some nails and beads. On the 20th, Mr. Banks, the captain, and others went on shore, accompanied by Tupia, who introduced them with the same kind of ceremonies that had taken place on their landing at Huaheine; after which Captain Cook took possession of this and the adjacent islands in the name of the King of Great Britain.

On the 22d and 23d, it being hazy weather with brisk gales, Captain Cook judged it rather unsafe to put to sea. On the 24th they got under sail, and steered to the northward within the reef, towards an opening five or six leagues distant. In effecting this, he was in the greatest danger of striking on a rock; the man who sounded, crying out on a sudden, two fathom, at which they were much alarmed, but happily got clear without receiving any damage.

The provisions of this island consist chiefly of cocoa-nuts, yams, plantains, and a few hogs and fowls; that part of the country where they landed is not so fruitful as either Otaheite or Huaheine.

On the 25th, they were within a league or two of the island of Otaha, but the wind continuing contrary, they could not get near enough to land till the 28th in the morning, when Mr. Banks and Dr Solander went in the long-boat, with the master, to sound a harbour on the east side of the island, which they found safe and convenient, with good anchorage. They then went on shore, and purchased some hogs and fowls, and a large quantity of yams and plantains.

This island appeared to be more barren than Ulietea, but the produce was much the same.

On the 29th they sailed to the northward, and in the afternoon, finding themselves to windward of some harbours that lay on the west side of Ulietea, they intended to put into one of them, in order to stop a leak which they had sprung in the powder-room, and to take in some additional ballast. The wind being right against them, they plied on and off till the afternoon of the 1st of August, when they came to an anchor in the entrance of the channel which led into one of the harbours.

Wednesday 2d of August, in the morning, when the tide turned, they came into a proper place for mooring, in twenty-eight fathoms. In the interim many of the natives

came off, and brought hogs, fowls, and plantains, which were purchased upon very moderate terms.

Mr. Banks and Dr. Solander went on shore, and spent the day very agreeably ; the natives shewing them great respect. Being conducted to the houses of the chief people, they were received in an uncommon manner. Upon their entrance into a house, they found those who had ran hastily before them, standing on each side of a long mat, spread upon the ground, and the family sitting at the further end of it. In one house they observed some very young girls, dressed in the neatest manner, who kept their places, waiting for the strangers to accost them : these girls were the most beautiful the gentlemen had ever seen.

Before their departure they were entertained with a dance, different from any they had seen before. The performer put upon his head a large piece of wicker-work, about four feet long, of a cylindrical form, covered with feathers, and edged round with shark's teeth. Having this head-dress on, which is called a Whou, he began to dance with a slow motion, frequently moving his head, so as to describe a circle with the top of his wicker cap, and sometimes throwing it so near the faces of the bystanders, as to make them jump back ; this they considered as an excellent piece of humour, and it always produced a hearty laugh, when practised upon any of the English gentlemen.

On the 3d, they saw another company of dancers, consisting of some of the principal people of the island. The women's necks, breasts, and arms, were naked ; the other parts of the body were covered with black cloth, which was fastened close round them ; and by the side of each breast, next the arms, was a small plume of black feathers, worn like a nosegay.

Thus apparelled they advanced sideways, keeping time with great exactness to the drums, which beat quick and loud ; soon after, they began to shake themselves in a very whimsical manner, and put their bodies into a variety of strange postures, sometimes standing in a row one behind another, sometimes sitting down, and at others falling with their faces to the ground, and resting on their knees and elbows, moving their fingers at the same time with a quickness scarcely to be credited. The chief dexterity, however, of these dancers, as well as the amusement of the spectators, consisted in the lasciviousness of their attitudes and gestures, which decency forbids us to describe.

On Saturday the 5th, some hogs and fowls, and several large pieces of cloth, many of them being fifty or sixty yards in length, together with a quantity of plantains and cocoa-nuts, were sent to Captain Cook as a present, from the Earee Rahie of a neighbouring island called Bolabola, accompanied with a message, that he was then on the island, and intended waiting on the captain the next day.

On Sunday the 6th, the King of Bolabola did not visit them agreeable to his promise ; his absence, however, was not in the least regretted, as he sent three very agreeable young women to demand something in return for his present. After dinner they set out to pay the King a visit on shore, as he did not think proper to come on board. As this man was the Earee Rahie of the Bolabola men, who had conquered this, and were the dread of all the neighbouring islands, they were greatly disappointed, instead of finding a vigorous, enterprising young chief, to see a poor feeble, decrepid old dotard, half blind, and sinking under the weight of age and infirmities. He received them without either that state or ceremony which they had hitherto met with among the other chiefs.

They had now plenty of hogs on board, but as they could not be brought to eat any sort of European grain, or any provender whatever that the ship afforded, they were

were reduced to the disagreeable necessity of killing them immediately on their leaving those islands; and the fowls all died of a disorder in their head, with which they were seized soon after they were brought on board.

As they were detained longer at Ulietea in repairing the ship than they expected, they did not go on shore at Bolabola; but, after giving the general name of the Society Islands to the whole group, which lie between the latitude of  $16^{\circ} 10'$ , and  $16^{\circ} 55'$  south, they pursued their course, standing southwardly for an island, to which they were directed by Tupia, at above an hundred leagues distant, which they discovered on Sunday the 13th, and were informed by him, that it was called Ohiteroa. The next morning they stood in for land. When they came near the shore, they could perceive that the inhabitants were armed with lances of a considerable length. The appearance of the boat soon drew together a great number of them upon the beach, two of whom leaped into the water, and endeavoured to gain the boat, but she soon left them behind: several others made the same attempt, but with as little success.

The boat having doubled the point where they intended to land, opened a large bay, and discovered another party of the natives standing at the end of it, in the same manner as those they had already seen. The boat's crew rowed towards the shore, and began to make preparations for landing, upon which a canoe, with some of the natives on board, came off towards them; they ordered Tupia to acquaint these people, that they did not intend doing them any injury, but wanted to traffic with them with nails, which they shewed them; this information encouraged them to come alongside the boat, and they accepted of some nails, which were given them, with much apparent pleasure and satisfaction: it soon appeared, however, to be nothing more than dissimulation; for, in a few minutes, several of them unexpectedly boarded the boat, with an intention of dragging her on shore; some muskets were immediately discharged over their heads, which had the desired effect, all of them leaping directly into the sea; and as soon as they reached the canoe, they put back to the shore as fast as they could paddle, where a vast concourse of their countrymen were assembled to receive them. The captain saw enough of their disposition to give up all hopes of establishing a friendly intercourse with them, and returned to the ship.

The people of this island are very tall, well proportioned, and have long hair, which, like the inhabitants of the other islands, they tie in a bunch on the top of their head; they are likewise tataowed on different parts of their bodies, but not on their posteriors.

This island does not shoot up into high peaks, like the others which they visited, but is more level and uniform, and divided into small hillocks, some of which are covered with groves of trees; they saw no bread-fruit, and not many cocoa-nut trees, but great numbers of the tree called etoa, were planted all along the shore.

On the 15th, they sailed to the southward, and on Friday the 25th, they celebrated the anniversary of their leaving England, from whence they had been absent one year: a large Cheshire cheese, which had been carefully preserved for that purpose, was brought out, and a barrel of porter tapped, which proved to be as good as any they had ever drank in England.

On Thursday the 7th of October, they discovered land at west-by-north, and in the afternoon of the next day, they came to an anchor opposite the mouth of a little river about a mile and a half from the shore. The captain, with Mr. Banks, Dr. Solander, and some other gentlemen, accompanied by a party of marines, went on shore in the evening, in the pinnace and yawl.

Having left the pinnace at the entrance of the river, Captain Cook, Mr. Banks, &c. proceeded a little farther up, when they landed, and leaving the yawl to the care of some

some of their boys, went up to a few small houses which they saw at a little distance. Taking the advantage of their absence from the boat, some of the natives, who had concealed themselves behind the bushes, suddenly rushed out, and ran towards it, brandishing the long wooden lances which they had in their hands in a threatening manner. The cockswain fired a musketoon over their heads, which did not seem to intimidate them; he then fired a second time over their heads, but with no better effect; alarmed at the situation of the boat, as they were now got near enough to discharge their lances at it, the cockswain levelled his piece at them, and shot one man dead on the spot. Struck with astonishment at the fall of their companion, they retreated to the woods with the utmost precipitation. The report of the gun soon brought the advanced party back to the boats, and both the pinnace and the yawl immediately returned to the ship.

On Monday the 9th, in the morning, a great number of the natives were seen near the place where the gentlemen in the yawl had landed the preceding evening, and the greatest part of them appeared to be unarmed. The long-boat, pinnace, and yawl, being ordered out, and manned with marines and sailors, Captain Cook, together with Mr. Banks, the rest of the gentlemen and Tupia went on shore, and landed on the opposite side of the river, over against several Indians who were sitting on the ground.

They started up as soon as the gentlemen began to land, and their intentions appeared very hostile, brandishing their weapons in the usual threatening manner; upon which a musket was fired at some distance from them, at the effect of which, the ball happening to strike the water, they appeared rather terrified, and desisted from their menaces. The marines being drawn up, the captain, with four or five of the gentlemen and Tupia, advanced nearer to the side of the river; Tupia spoke to them, and informed them, that they wanted to traffic with them for provisions. They readily consented to trade, and requested the English gentlemen to cross the river and come over to them; which was agreed to, upon condition that the natives would quit their weapons; but this the most solemn assurances of friendship could not prevail on them to comply with.

The gentlemen in their turn intreated the Indians to come over to them, which after some time they prevailed on one of them to do; he was presently followed by several others, bringing their weapons with them. They did not appear to set any great value on the beads, iron, &c. which was presented to them, nor would they give any thing in return, but proposed to exchange their weapons for those belonging to the English, which being consequently objected to, they endeavoured several times to snatch them out of their hands. But their attempts to seize the arms were repeatedly frustrated, and Tupia, by direction of the gentlemen, gave them notice, that any further offer of violence would be punished with instant death. One of them had, nevertheless, the audacity to snatch Mr. Green's hanger, and retiring a few paces, flourished it over his head; he, however, paid for his temerity with his life, Mr. Monkhouse firing at him with a musquet loaded with ball; and that gentleman afterwards, with great difficulty recovered the hanger, one of the Indians endeavouring to seize it.

This behaviour of the natives, added to the want of fresh water, induced Captain Cook to continue his course round the head of the bay. He was still in hopes of getting some of the Indians on board, and by presents added to civil usage, convey through them a favourable idea of the English to their fellow-countrymen; and thereby settle a good correspondence with them. Soon after an event occurred, though attended with disagreeable circumstances, that promised to facilitate this design. Two

canoes appeared making towards land, and Captain Cook proposed intercepting them with his boats. One of them got clear off, but the Indians in the other, finding it impossible to escape the boats, began to attack them with their paddles: this compelled the Endeavour's people to fire upon them, when four of the Indians were killed, and the other three, who were youths, jumped into the water, and endeavoured to swim to shore: they were however taken up and brought on board. They were at first greatly terrified, thinking they should be killed; but Tupia, by repeated assurances of friendship, removed their fears, and they afterwards eat very heartily of the ship's provisions. When they retired to rest, in the evening, they appeared perfectly easy in their minds, and slept very quietly. The next morning, after they were dressed and ornamented, according to the mode of the country, with necklaces and bracelets, Captain Cook proposed setting them on shore, that they might give a favourable report to their countrymen of the reception they had met with. They testified much satisfaction when told they were going to be released; the names of these boys were Taahourange, Koikerange, and Maragovete. They informed Captain Cook, that there was a particular kind of deer upon the island, likewise taro, eapes, romara, yams, a kind of long pepper, bald coote, and black birds.

On the 11th Captain Cook set sail, in hopes of finding a better anchoring place, after giving this bay (called by the natives Toaneora) the name of Poverty Bay; and the south-west point he called Young Nick's Head, on account of its being first perceived by a lad on board named Nicholas Young.

Captain Cook gave the name of Cape Table to a point of land about seven leagues to the south of Poverty Bay, its figure greatly resembling a table; and the island, called by the natives Teahowry, he named Portland Island, it being very similar to that of the same name in the British Channel.

On the 12th several Indians came off in a canoe; they were disfigured in a strange manner, danced and sung, and appeared at times to be peaceably inclined, at others to menace hostilities; but notwithstanding Tupia strongly invited them to come on board, none of them would quit the canoe. Whilst the Endeavour was getting clear of the shambles, five canoes full of Indians came off, and seemed to threaten the people on board, by brandishing their lances, and other hostile gestures; a four pounder, loaded with grape-shot, was therefore ordered to be fired, but not pointed at them. This had the desired effect, and made them drop astern. Next morning nine canoes full of Indians came from the shore, and five of them, after having consulted together, pursued the Endeavour, apparently with a hostile design. Tupia was desired to acquaint them that immediate destruction would ensue, if they persevered in their attempts; but words had no influence, and a four pounder, with grape shot, was fired, to give them some notion of the arms of their opponents. They were terrified at this kind of reasoning, and paddled away faster than they came.

The following day, Sunday the 15th, in the afternoon, a large canoe, with a number of armed Indians, came up, and one of them, who was remarkably clothed with a black skin, found means to defraud the captain of a piece of red baize, under pretence of bartering the skin he had on for it. As soon as he had got the baize into his possession, instead of giving the skin in return, agreeable to his bargain, he rolled them up together, and ordered the canoe to put off from the ship, turning a deaf ear to the repeated remonstrances of the captain against his unjust behaviour. After a short time this canoe, together with the fishing-boats which had put off at the same time, came back to the ship, and trade was again begun. During this second traffic with the Indians, one of them unexpectedly seized Tupia's little boy Tayota, and pulling him



him into his canoe, instantly put her off, and paddled away with the utmost speed; several musquets were immediately discharged at the people in the canoe, and one of them receiving a wound, they all let go the boy, who before was held down in the bottom of the canoe. Tayota, taking the advantage of their consternation, immediately jumped into the sea, and swam back towards the Endeavour. He was taken on board without having received any harm; but his strength was so much exhausted with the weight of his clothes, that it was with great difficulty he reached the ship. In consequence of this attempt to carry off Tayota, Captain Cook called the cape off which it happened Cape Kidnappers. Its distance from Portland Island is about thirteen leagues, forming the south point of a bay, which the captain named Hawke's Bay, in honour of Sir Edward, who then presided at the Admiralty board.

As every circumstance that tends to elucidate the manners and customs of these people must attract the attention of the curious reader, we cannot omit Tayota's behaviour upon recovering from his fright, occasioned by his being kidnapped. He produced a fish, and acquainted Tupia, that he designed to make an offering of it to his God, or Eatua, as a testimonial of his gratitude for his deliverance. Tupia approved of his intention, and by his direction the fish was cast into the sea. This is an evident proof, that even these unenlightened savages, by the mere impulse of nature, believe in the existence of a particular providence.

The Endeavour now passed a small island, white and high, supposed to be inhabited only by fishermen, as it appeared quite barren, and was named Bare Island. On the 17th, Captain Cook gave the name of Cape Turnagain to a head-land. This cape is remarkable for a stratum of clay of a bright brown colour; its prominence gradually diminishes towards the north side, but to the south its descent is not so regular.

The land between this cape and Kidnapper's Bay is unequal, and resembles the high downs of England. There appeared numerous inhabitants, and several villages. Wednesday the 18th, the Endeavour came abreast of a peninsula in Portland Island, named Terakako, when a canoe with five Indians came up to the ship. Two chiefs who were in this canoe came aboard, where they remained all night, and were treated with great civility. The chiefs would neither eat nor drink, but the servants made up for their masters' abstinence by their voracious appetites. The three boys had given these natives an account of the hospitality and liberality of the English, which had prevailed upon them to pay this visit.

Thursday the 19th, the Endeavour passed a remarkable head-land, which Captain Cook named Gable-End Foreland. It is distinguished by a rock, in the shape of a church spire, which is very near it. Here three canoes came up, and one Indian came on board; he received some small presents, and retired to his companions. He wore a new garment of white silky flax, with a border of black, red, and white.

Many of the Indians had pieces of green stone round their necks, by way of necklaces; they were transparent, like an emerald, and appeared, on examination, to be a species of nephritic stone, of which all their ornaments of this kind consisted. Mr. Banks and the other gentlemen obtained several pieces of it.

On the 20th they anchored in a bay, about two leagues to the north of the foreland. The natives in canoes invited them hither, and behaved very amicably. There appeared to be two chiefs, who came on board. They received presents of linen, which gave them much satisfaction; but they did not hold spike-nails in such estimation as the inhabitants of some of the other islands. The captain, Mr. Banks, and Dr. Solander, went on shore, and were courteously received by the inhabitants, who did not appear in numerous bodies to avoid giving offence. The captain had the pleasure to find fresh  
water







water, in the course of a tour round the bay. They remained on shore all night, and next day Mr. Banks and the doctor discovered several plants, and many birds, particularly quails and large pigeons. Dogs with small pointed ears, and very shy, were the only tame animals among them. They have sweet potatoes, like those of North America, in great quantities; and the clove plant grows here spontaneously. There is plenty of fish in the bay, such as crabs, cray-fish, and ship-jacks or horse-mackerel, which are larger than those upon our coasts.

Mr. Banks and Dr. Solander visited their houses, and were kindly received. Fish constituted their principal food at this time, and the root of a sort of fern served them for bread, which, when roasted upon a fire, and divested of its bark, was sweet and clammy; in taste not disagreeable, but unpleasant from its number of fibres. Vegetables were, doubtless, at other seasons very plentiful. The women paint their faces red, which so far from increasing, diminishes the very little beauty they have. The men's faces were not in general painted, but some were rubbed over with red ochre from head to foot, their apparel not excepted. Though they could not be compared to the inhabitants of Otaheite for cleanliness in general, they surpassed them in this respect in some particulars. Every dwelling was supplied with a privy, and they had dunghills for depositing dirt and filth. The women wore a girdle made of the blade of grass under a petticoat, and to this girdle was tied in front a bunch of fragrant leaves. They seemed to hold chastity in but little estimation, many of the young females resorting to the watering place, where they bountifully bestowed every favour that was requested. One of the officers on shore meeting with an elderly woman, he accompanied her to her house, and having presented her with some cloth and beads, a young girl was singled out, and he was given to understand he might retire with her. Soon after an elderly man, with two women, came in as visitors, and with much formality saluted all the company, according to the custom of the place, which is by gently joining the tips of their noses together. Several of the Indians went on board, and testified their curiosity and surprise with regard to the different parts of the ship.

Sunday the 22d, in the evening, they sailed from this bay, which by the natives is called Tegadoo. The wind being contrary, they put into another bay a little to the south, called by the natives Tolaga, in order to complete their wood and water, and extend their correspondence with the natives.

On the 24th, Mr. Gore and the marines were sent on shore to guard the people employed in cutting wood and filling water. Captain Cook, Mr. Banks, and the doctor also went on shore; the two latter employed themselves in collecting plants. In their route they found in the vales many houses uninhabited, the natives residing chiefly in flight sheds on the ridges of the hills, which are very steep. In a valley between two very high hills they saw a curious rock that formed a large arch, opposite to the sea. This cavity was in length above seventy feet, in breadth thirty, and near fifty in height; it commanded a view of the hills and the bay, which had a very happy effect. Indeed the whole country about the bay is agreeable beyond description, and if properly cultivated would be a most fertile spot. Upon their return, they met an old man, who entertained them with the military exercise of the natives, which are performed with the patoo-patoo, and the lance. The former is used as a battle-axe; the latter is ten or twelve feet in length, made of extreme hard wood, and sharpened at each end. A stake was substituted for their old warrior's supposed enemy; he first attacked him with his lance, when, having pierced him, the patoo-patoo was used to demolish his head, and the force with which he struck would at one blow have split any man's skull. Their tattooing is done very curiously in various figures, which makes their

skin resemble carving; it is confined to the principal men, the females and servants using only red paint, with which they daub their faces, that otherwise would not be disagreeable. Their cloth is white, glossy, and very even; it is worn principally by the men, though it is wrought by the women, who, indeed, are condemned to all the drudgery and labour.

In conversation with the natives, it was found they eat their enemies after they are killed in war. Captain Cook and Dr. Solander went on the 27th to inspect the bay, when the doctor was not a little surprised to find the natives in possession of a boy's top, which they knew how to spin by whipping it, and he purchased it out of curiosity. At the watering-place, the Indians by desire sung their war-song, which was a strange medley of shouting, singing, and grimace, at which the women assisted. The next day Captain Cook and the other gentlemen went upon an island at the entrance of the bay, and met with a canoe that was sixty-seven feet in length, six in breadth, and four in height; her bottom, which was sharp, consisted of three trunks of trees, and the sides and head were curiously carved. Their favourite figure is a volute, or spiral, which is sometimes single, double, and triple, and is done with great exactness, though the only instruments the gentlemen saw were an axe made of stone, and a chissel.

There are many beautiful parrots, and great numbers of birds of different kinds, particularly one whose note resembled the European black-bird; but here is no ground-fowl or poultry, nor were there any quadrupeds, except rats and dogs, and these were not numerous. The dogs are considered as delicate food, and their skins serve for ornaments to their apparel.

Sunday, October 29th, they set sail from this bay, which is called by the natives Tolaga. This is a very hilly country, though it presents the eye with an agreeable verdure, various woods, and many small plantations. Mr. Banks met with a great number of trees in the woods, quite unknown to Europeans. The fire-wood resembled the maple-tree, and produced a gum of whitish colour. The only roots they met with were yams and sweet potatoes.

Sailing to the northward, they fell in with a small island, about a mile distant from the north-east point of the main; and this being the most eastern part of it, the captain named it East Cape, and the island East Island: it was but small, and appeared barren. In the evening of the 30th, Lieutenant Hicks discovered a bay, to which his name was given. Next morning, about nine, several canoes came off from shore with a number of armed men, who appeared to have hostile intentions. Before these had reached the ship, another canoe, larger than any that had yet been seen, full of armed Indians, came off, and made towards the Endeavour with great expedition. The captain now judging it expedient to prevent, if possible, their attacking him, ordered a gun to be fired over their heads; this not producing the desired effect, another gun was fired with ball, which threw them into such consternation, that they immediately returned much faster than they came. This precipitate retreat induced the captain to give the cape-off which it happened the name of Cape Runaway. Next morning, at day-break, they saw between forty and fifty canoes along shore, many of which came off in the manner they had done the day before, shouting, and menacing an attack. One of their chiefs in the largest of the canoes made several harangues, and by the menacing flourish of his pike, seemed to bid the ship defiance; but the gentlemen continuing to invite them to trade, they at last came close alongside, and the chief who had been declaiming, after uttering a sentence, took up a stone and threw it against the side of the ship, which appeared to be a declaration of hostilities, as they instantly seized their arms. One of them took some linen that was hanging to dry, and made off

off with it. A musquet was fired over his head to make him return, but this did not prevail; and even after another was fired at him with small shot, which hit him in the back, he still persevered in his design. Upon this the rest of the Indians dropped astern at some distance, and set up their song of defiance. They did not, however, make any preparations for attacking the ship; but the captain judged, that if he suffered them to go off without convincing them of his power of avenging the insult, it might give an unfavourable opinion of the English to the natives on shore. He accordingly fired a four-pounder, which passed over them, and the effect it had in the water terrified them so greatly, that they made to shore with the utmost precipitancy. In the afternoon they descried a high island to the west, and some time after perceived some other islands and rocks in the same quarter; not being able to weather them before night came on, they bore up between them and the main land. About seven in the evening a double canoe, built like those at Otaheite, but carved after their peculiar manner, came up to the ship, and Tupia entered into a friendly conversation with the Indians on board; when, on a sudden, it being now dark, they pelted the ship with stones, and then retreated.

The Endeavour passed the night under an island about twenty miles from the main, which they named the Mayor. In the morning of the 3d, they gave the name of the Court of Aldermen to a number of small islands that lay contiguous. The chief, who governed the district from Cape Turnagain to this coast, was named Teratu.

On Friday the 4th, three canoes came along side with several Indians. These canoes were built very different from the others, being formed of the trunks of single trees, made hollow by burning; they were not carved, or in any shape ornamented. These Indians were of a darker complexion than the others, but made use of the same modes of defiance, and threw several stones and some of their lances into the ship.

The same afternoon the Endeavour sailed towards an inlet they had discovered, and anchored in seven fathom water. She was soon after surrounded by several canoes, and the Indians at first did not shew any signs that they intended committing hostilities. One of the Endeavour's people shot a bird, which the Indians conveyed on board, without testifying any surprise at the event. For their civility the captain gave them a piece of cloth. But this favour had a very opposite influence to what was expected, for when it grew dark they sung one of their menacing songs, and attempted to carry off the anchor's buoy. Some musquets were now fired over them, which seemed rather to irritate than terrify them, and upon their going off, they threatened to return the next morning in greater numbers; they came back however the same night about eleven o'clock, in hopes of surprising the ship's crew; but finding them on their guard, they again retired.

In the morning of the 5th, a great number of canoes, with near two hundred men, armed with spears, lances, and stones, made their appearance, seemingly resolved to attack the ship, and desirous of boarding her, but could not determine at what part, changing their stations, and paddling round her. These motions kept the crew upon the watch, in the rain, whilst Tupia, at the request of the captain, used every dissuasive argument he could suggest to prevent their carrying their apparent designs into execution; but his expostulations did not pacify them, till some muskets were fired; they then laid aside their hostile intentions, and began to trade. They sold two of their weapons without fraud, but a third, for which they had received cloth, they would not deliver up, and instead of paying any attention to the demand that was made of it, they only laughed at them, and turned their expostulations into ridicule. As the cap-

tain

tain proposed to stay some days at this place, that he might observe the transit of Mercury, he judged it expedient to chastise these people for their insolence and knavery; accordingly some small shot were fired upon the principal offender, and a musquet-ball went through his canoe. His companions left him to his fate, without taking the least notice of him, though he was wounded, and continued to trade without any discomposure. They for some time traded very fairly, but returning to their mal-practices, another canoe was fired upon, and struck; they soon after paddled away, whilst a round shot was fired over them.

Several of the Indians came off to the ship on the 5th, but behaved much better than they had done the preceding day. They had with them an old man, who had before testified his probity and discretion; and he appeared to be of superior rank to the rest. He came on board with another Indian, when the captain presented them with some nails, and two pieces of cloth of English manufacture. Tojava (which was the name of the old man) informed Mr. Banks, that the natives had been in great terror of the English; when he was informed, that the captain and his people had no ill design against the Indians, but, on the contrary, wanted to establish a friendly intercourse, and to traffick with them. Tojava then acquainted the captain, that they were often visited by free-booters from the north, who stripped them of all they could lay their hands on, and often made captives of their children and wives; and that being ignorant who the English were upon their arrival, the natives had taken the alarm upon the ship's appearing off the coast, but were now satisfied of their good intent. Probably, their poverty and misery may be ascribed to the ravages of this banditti, who often strip them of every necessary of life.

The assurances of friendship which they had received from the gentlemen on board, seemed to have a proper influence upon the natives, who were now very tractable and submissive. In a word, the natives now treated the English with great hospitality; a large supply of wood and good water was obtained, and the ship being very foul, was heeled, and her bottom scrubbed in the bay.

November the 8th, the Indians supplied the ship's crew with as much excellent fish, resembling mackerel, as was sufficient for all their dinners, for which they gave some pieces of cloth.

A great variety of plants were this day collected by Mr. Banks and Dr. Solander: they had never observed any of the kind before.

Early in the morning of the 9th, several canoes brought a prodigious quantity of mackerel, one sort of which was no way different from the mackerel caught on our coast. These canoes were succeeded by many others, equally well loaded with the same sort of fish; and the cargoes purchased were so great, that when salted, they might be considered as a month's provision for the whole ship's company.

This being a very clear day, the astronomer (Mr. Green) and the other gentlemen landed to observe the transit of Mercury. Whilst the observation was making, a large canoe, with various commodities on board, came alongside the ship; and Mr. Gore, the officer who had then the command, being desirous of encouraging them to traffick, produced a piece of Otaheitean cloth, of more value than any they had yet seen, which was immediately seized by one of the Indians, who obstinately refused either to return it, or to give any thing in exchange; he paid dearly however for his temerity, being shot dead on the spot.

The death of this young Indian alarmed all the rest; they fled with great precipitancy, and for the present could not be induced to renew their traffick with the English.

But

But when the Indians on shore heard the particulars related by Tojava, who greatly condemned the conduct of the deceased, they seemed to think that he merited his fate. His name proved to be Otirreeoonooe.

This transaction happened, as has been mentioned, whilst the observation was making of the transit of Mercury, when the weather was so favourable that the whole transit was viewed without a cloud intervening. Mr. Green made the observation of the ingress, whilst Captain Cook was engaged in ascertaining the time, by taking the sun's altitude. In consequence of this observation having been made here, this bay was called Mercury Bay.

On the 10th, Mr. Banks, Dr. Solander, and the Captain, went in boats to inspect a large river, that runs into the bay. They found it broader some miles within than at the mouth, and intersected into a number of streams, by several small islands, which were covered with trees. On the east side of the river the gentlemen shot some snags, which proved very good eating.

The Indians sup before sun-set, when they eat fish and birds baked or roasted. A female mourner was present at one of their suppers; she was seated upon the ground, and wept incessantly, at the same time repeating some sentences in a doleful manner, but which Tupia could not explain; at the termination of each period she cut herself with a shell upon her breast, her hands, or her face; notwithstanding this shocking bloody spectacle greatly affected the gentlemen present, yet all the Indians saw it with indifference.

November 11th, great plenty of oysters were procured from a bed which had been discovered, and they proved exceedingly good. Next day the ship was visited by two canoes, with unknown Indians; after some invitation they came on board, and they all trafficked without any fraud.

They sailed from this bay, after taking possession of it in the name of the King of Great Britain on the 15th of November. A number of islands, of different sizes, appeared toward the north-west, which were named Mercury Islands. On account of the number of oysters found in the river, the captain gave it the name of Oyster river. The inhabitants, though numerous, have no plantations; their canoes are very indifferently constructed, and are no way ornamented.

Upon this shore iron sand is in plenty to be found, which proves that there are mines of that metal up the country, it being brought down by a rivulet from thence.

On the 18th, in the morning, the Endeavour steered between the main, and an island which seemed very fertile, and as extensive as Ulietea. Many canoes filled with Indians came along side, and the Indians sung their war song; the Endeavour's people paying them no attention, they threw a volley of stones, and then paddled away; but they presently returned and renewed their insults. However, upon a musquet being fired at one of their boats, they made a precipitate retreat.

In the evening they cast anchor in twenty-three fathom water, and early the next morning they sailed up an inlet. The Endeavour was now in a bay, called by the natives Ooahaouragee, and Captain Cook, with Mr. Banks and Dr. Solander, &c. went in the boats to the bottom of the bay to examine it, and they did not return till next morning. At the entrance of a wood they met with a tree ninety-eight feet high from the ground to the first branch, quite straight, and nineteen feet in circumference; and they found still larger trees of the same kind as they advanced into the wood. The captain called this river Thames, being not unlike our river of that name.

The ship, at their departure was surrounded with canoes, which induced Mr. Banks to remain on board, that he might trade with the Indians. Though the traders were 'honest



honest in their dealing, there was one amongst them who took a fancy to a half-minute glass, but was detected in secreting it, and he was punished with the cat-o'-nine tails. The other Indians endeavoured to save him from this punishment; but being opposed, they got their arms from the canoes, and some of the people in them attempted to get on board. Mr. Banks and Tupia now coming upon deck, the Indians applied to Tupia, but he having no influence upon Mr. Hicks, the commanding officer, informed them of the nature of the offender's intended punishment, which pacified them, as they imagined he was going to be put to death. The criminal not only received twelve lashes, but afterwards a drubbing from an old man, who was thought to be his father.

On the 23d they tided it down the river, and on the 24th they steered along the shore, between the islands and the main, and in the evening anchored in an open bay, in about fourteen fathoms water. Here they caught a large number of fish of the sciennie, or bream kind; from which the captain named this Bream Bay, and the extreme points of it Bream Head. There are numbers of rocks off this bay, which were called the Hen and Chickens. No inhabitants were visible; but from the fires perceived at night, the gentlemen concluded it was inhabited.

Sunday the 26th, Captain Cook continued his course slowly along the shore to the north. This day two canoes came up, and some of the Indians came on board, when they trafficked very fairly. Two larger canoes soon after followed them, and coming up to the ship, the people in them hailed the others, when they conferred together, and afterwards came along side of the ship. The last two canoes were finely ornamented with carving, and the people, who appeared to be of higher rank, were armed with various weapons; they held in high estimation their patoo-patoos, which were made of stone and whalebone, and they had ribs of whale with ornaments of dog's hair, which were very curious.—These Indians seemed the superiors of the others, they were nevertheless not free from the vice of pilfering, for one of them having agreed to barter a weapon for a piece of cloth, he was no sooner in possession of the cloth than he paddled away without paying the price of it; but a musquet being fired, he came back and returned the cloth. All the canoes then returned ashore.

The Endeavour passed a remarkable point of land, which the captain called Cape Bret, in honour of the Baronet of that name; this cape is much higher than any of the adjacent land. Within a mile to the north-east-by-north is a curious rocky island; it is arched, and has a pleasing effect at a distance. The natives call this Cape Motugogogo: it forms a bay to the west, which contains many small islands, and Captain Cook named the point at the north-west entrance Point Pococke. The inhabitants had the same itch for cheating as the others. One of the midshipmen was so nettled at being imposed upon, that he had recourse to a whimsical expedient by way of revenge; taking a fishing line, he threw the lead with so much dexterity, that the hook caught the Indian who had imposed upon him by the buttock, when the line breaking, the hook remained in his posteriors. These Indians were strong and well-proportioned; their hair was black, and tied up in a bunch, stuck with feathers; the chiefs among them had garments made of fine cloth, ornamented with dog's skin; and they were also tataowed.

On the 27th, the Endeavour was among a number of small islands, from which several canoes came off; but the Indians, from their frantic gestures, seemed disordered in their minds; they threw their fish into the ship by handfuls, without demanding any thing by way of barter. Some other canoes also came up, and saluted the ship with stones. One of the Indians who was particularly active, threw a stick at one of the Endeavour's men. It was then judged time to bring them to reason, and a musquet,

musquet, with small shot, was fired at him, when he fell down in the canoe. A general terror was now spread amongst them, and they all made a very precipitate retreat. Among the fish obtained from these canoes, were cavelles in great plenty, and for this reason the captain called these islands by the same name.

For several days the wind was so very unfavourable, that the vessel rather lost than gained ground. On the 29th, having weathered Cape Bret, they bore away to leeward, and got into a large bay, where they anchored on the south-west side of several islands; after which the ship was surrounded by thirty-three large canoes, containing near three hundred Indians, all armed. Some of them were admitted on board and Captain Cook gave a piece of broad cloth to one of the chiefs, and some small presents to the others. They traded peaceably for some time, being terrified at the fire-arms, the effect of which they were not unacquainted with; but whilst the captain was at dinner, on a signal given by one of their chiefs, all the Indians quitted the ship, and they attempted to tow away the buoy; a musquet was now fired over them, but it produced no effect; small shot was then fired at them, but it did not reach them. A musquet loaded with ball, was therefore ordered to be fired, and Otegoowgoow (son of one of the chiefs) was wounded in the thigh by it, which induced them immediately to throw the buoy overboard. To complete their confusion a round shot was fired, which reached the shore, and as soon as they landed they ran in search of it. If these Indians had been under any kind of military discipline, they might have proved a much more formidable enemy; but acting thus, without any plan or regulation, they only exposed themselves to the annoyance of fire-arms, whilst they could not possibly succeed in any of their designs.

The captain, Mr. Banks, and Dr. Solander landed upon the island. The gentlemen were now in a small cove, and they were presently surrounded by near four hundred armed Indians; but the captain not suspecting any hostile design on the part of the natives, remained peaceably disposed. The gentlemen marching towards them, drew a line, intimating that they were not to pass it; they did not infringe upon this boundary for some time, but at length they sung the song of defiance, and began to dance, whilst a party attempted to draw the Endeavour's boats on shore. These signals for an attack being immediately followed by the Indians breaking in upon the line, the gentlemen judged it time to defend themselves, and accordingly the captain fired his musquet, loaded with small shot, which was seconded by Mr. Banks discharging his piece, and two of the men followed his example. This threw the Indians into great confusion, and they retreated; but were rallied again by one of their chiefs, who shouted and waved his patoo-patoo. The doctor now pointed his musquet at this hero, and hit him; this stopped his career, and he took to flight with the other Indians. They retired to an eminence in a collective body, and seemed dubious whether they should return to the charge. They were now at too great a distance for ball to reach them; but these operations being observed from the ship, she brought her broad side to bear, and by firing over them soon dispersed them. The Indians had in this skirmish two of their people wounded, but none killed. Peace being thus restored, the gentlemen began to gather celery and other herbs; but suspecting some of the natives were lurking about with evil designs, they repaired to a cave, which was at a small distance; here they found the chief, who had that day received a present from the captain; he came forth with his wife and brother, and solicited their clemency. It appeared that one of the wounded Indians was a brother of this chief, who was under great anxiety lest the wound should prove mortal; but his grief was in a great degree alleviated, when he was made acquainted with the different effects of small shot and ball: he was at the same time assured, that upon any future hostilities being committed, ball would be used.

uled. This interview terminated very cordially, after some trifling presents were made to the chief and his companions.

The prudence of the gentlemen upon this occasion cannot be much commended. Had these four hundred Indians boldly rushed in upon them at once with their weapons, the musquetry could have done very little execution; but supposing twenty or thirty of the Indians had been wounded, for it does not appear their pieces were loaded with ball, but only small shot, there would have remained a sufficient number to have massacred them, as it appears they do not give any quarter, and none could have been expected upon this occasion.—It is true, when the ship brought her broad-side to bear, she might have made great havock amongst the Indians; but this would have been too late to save the party on shore.

Being again in their boats, they rowed to another part of the same island, when landing and gaining an eminence, they had a very agreeable and romantic view of a great number of islands, well inhabited and cultivated. The inhabitants of an adjacent town approached unarmed, and testified great humility and submission.—Some of the party on shore, who had been very violent for having the Indians punished for their fraudulent conduct, were now guilty of trespasses equally reprehensible, having forced into some of the plantations, and dug up potatoes. The captain upon this occasion shewed strict justice, in punishing each of the offenders with twelve lashes; one of them being very refractory upon the occasion, and complaining of the hardship, thinking an Englishman had a right to plunder an Indian with impunity, was flogged out of his opinion with six additional lashes. Probably, his adding, “that in this he had only followed the example of his superiors,” might have had no little weight in procuring him this last sentence.

On Tuesday the 5th, in the morning, they weighed anchor, but were soon becalmed, and a strong current setting towards the shore, they were driven in with such rapidity, that they expected every moment to run upon the breakers, which appeared above water not more than a cable's length distance; they were so near the land, that Tupia, who was totally ignorant of the danger, held a conversation with the Indians, who were standing on the beach. They were happily relieved, however, from this alarming situation by a fresh breeze suddenly springing up from the shore.

The bay which they had left was called the Bay of the Islands, on account of the numerous islands it contains; they caught but a few fish while they lay there, but procured great plenty from the natives, who are extremely expert at fishing.

December the 7th, several canoes put off and followed the Endeavour, but a breeze arising, Captain Cook did not wait for them. On the 8th, they tacked and stood in for the shore; and on the 9th, came to a deep bay, which the captain called Doubtless Bay. The wind prevented their putting in here. They beat to windward four days, and made but little way. On the 10th, the land appeared low and barren, but was not destitute of inhabitants; the next morning they stood in with the land, which forms a peninsula, and which the captain named Knuckle Point. Another bay, that lies contiguous, Captain Cook called Sandy Bay; in the middle of it is a high mountain, which was named Mount Camel, on account of its resembling that animal. On the 16th came off the northern extremity of New Zealand, which the captain called North Cape. Their situation varied but little until the 24th, when they discovered land, which they judged to be the islands of the Three Kings, though they did not resemble the description of them in Dalrymple's account. Mr. Banks went out in the small boat, and caught some birds that greatly resembled geese, and they were very good eating.

January 1, 1770, they tacked and stood to eastward, and on the 3d they saw land again; it was high and flat, and trended away to the south-east, beyond the reach of

the naked eye. It is remarkable, that the Endeavour was three weeks in making ten leagues to the westward. On the morning of the 4th they stood along the shore, the coast appearing sandy and barren. They saw a sun-fish, short and thick in figure, with two large fins, but scarce any tail, resembling a shark in colour and size.

On the 9th they saw a point remarkably high to the east-north-east; the captain named it Albetros Point, on the north side of which a bay is formed that promises good anchorage. At about two leagues distance from Albetros Point, to the north-east, they discovered a remarkable high mountain, equal in height to that of Teneriffe, the summit of which was covered with snow, and it was named Mount Egmont. This day some very heavy showers of rain fell, accompanied with thunder and lightning. The captain proposed careening the ship here, and taking in wood and water; and accordingly, on the 15th, steered for an inlet. Here they saw a sea-lion; it is a very curious creature, and answers the description given of it in Lord Anson's Voyage. In passing the point of the bay, they observed an armed sentinel on duty, who was twice relieved. Four canoes came from shore to visit the ship, but none of the Indians would venture on board, except an old man, who seemed of elevated rank; he was received with the utmost hospitality. The captain and the other gentlemen now went on shore, where they met with plenty of wood and water, and were very successful in fishing, catching some hundred weight in a short time.

On the 16th, the Endeavour's people were engaged in careening her, when three canoes came off with a great number of Indians, and brought several of their women with them. This circumstance was judged a favourable preface of their peaceable disposition; but they soon gave proofs of the contrary, by attempting to stop the long-boat that was sent ashore for water, when Captain Cook had recourse to the old expedient of firing some shot, which intimidated them for the present. Tupia, in conversing with them, and making many inquiries concerning the curiosities of New Zealand, asked them, if they had ever before seen a ship of the magnitude of the Endeavour; to which they replied, they had never seen such a vessel, nor ever heard that one had been upon the coast. There is great plenty of fish in all the coves of this bay; among others here are cuttle-fish, large breams, small grey breams, small and large baracootas, flying gurnards, horse-mackerel, dog-fish, soles, dabs, mullets, drums, scorpenas or rock-fish, cole-fish, shags, chimeras, &c. The inhabitants catch their fish as follows: their net is cylindrical, extended by several hoops at the bottom, and contracted at the top; the fish going in to feed upon what is put in the net, are caught in great abundance. There are also birds of various kinds, and in great numbers, particularly parrots, wood-pigeons, water-hens, hawks, and many different singing birds. An herb, a species of *Philadelphus*, was used here instead of tea; and a plant, called teegoome, resembling rug-cloaks, served the natives for garments. The environs of the cove where the Endeavour lay are covered entirely with wood, and the supple-jacks are so numerous, that it is with difficulty passengers can pursue their way; here is a numerous sand-fly that is very disagreeable. The tops of many of the hills are covered with fern. The air of the country is very moist, and has some qualities that promote putrefaction, as birds that had been shot but a few hours were found with maggots in them. They dispose of their dead in a very singular manner: they tie a large stone to the body, and throw it into the sea. The gentlemen saw the body of a woman which had been disposed of this way, but which by some accident had disengaged itself from the stone, floating upon the water. The captain, Mr. Banks, and the doctor, visited a cove, about two miles from the ship. There was a family of Indians, who were greatly alarmed at the approach of the gentlemen, all running away except one; but upon Tupia's con-

verfing with him, the others returned. They found, by the provifions of this family, that they were cannibals, here being feveral human bones that had been lately drefled and picked; and it appeared, that a fhort time before, fix of their enemies having fallen into their hands, they had killed four and eaten them, and that the other two were drowned in endeavouring to make their efcape. They made no fecret of this abominable cuftom, but answered Tupia, who was defirous to afcertain the fact, with great compofure, that his conjectures were juft, that they were the bones of a man, and testified by figns that they thought human flefh delicious food. Upon being asked, why they had not eaten the body of the woman that had been feen floating upon the water? They replied, fhe had died of a diforder, and that moreover fhe was related to them, and they never ate any but their enemies. Upon Mr. Banks's ftill testifying fome doubts concerning the fact, one of the Indians drew the bone of a man's arm through his mouth, and this gentleman had the curiofity to bring it away with him. There was a woman in this family whofe arms and legs were cut in a fhocking manner, and it appeared fhe had thus wounded herfelf, becaufe her husband had lately been killed and eaten by the enemy.

Some of the Indians brought four skulls one day to fell, which they rated at a very high price. The brains had been taken out, and probably eaten, but the fcalp and hair remained. They feemed to have been dried by fire, in order to preferve them from putrefaction. The gentlemen likewife faw the bail of a canoe, which was made of a human skull. In a word, their ideas were fo horrid and brutal, that they feemed to pride themfelves upon their cruelty and barbarity, and took a peculiar pleafure in fhewing the manner in which they killed their enemies, it being confidered as very meritorious to be expert at this deftruction. The method ufed was to knock them down with their patoo-patoos, and then rip up their bellies.

An amazing number of birds ufually began their melody about two o'clock in the morning, and ferenaded the gentlemen till the time of their rifing. This harmony was very agreeable, as the fhip lay at a convenient diftance from the fhore to hear it. Thefe feathered chorifters, like the Englifh nightingales, never fmg in the day time.

On the 20th, Mr. Banks purchafed of the old Indian a man's head, which he feemed very unwilling to part with; the skull had been fractured by a blow, and the brains were extracted, and like the others, it was preferved from putrefaction. From the care with which they kept thefe skulls, and the reluctance with which they bartered any, it was imagined they were confidered as trophies of war, and testimonials of their valour. Some of the company, in their excursions, met with fortifications that had not the advantage of an elevated fituation, but were furrounded by two or three wide ditches, with a draw-bridge, which, though fimple in its ftructure, is capable of anfwering every purpofe againft the arms of the natives. Not only thofe who are killed, but the prifoners likewife are devoured by the victors. From what has been related by fuch unqueftionable authority, there can remain no doubt with the unprejudiced reader, that the inhabitants of this part of the globe are cannibals.

The 22d was employed by Mr. Banks and Dr. Solander in collecting of plants. On the 24th they vifited a hippah, which was fituated on a very high rock, hollow underneath, forming a fine natural arch, one fide of which joined to the land, and the other rofe out of the fea. This hippah was partly furrounded with a pallifade. Here they met with a crofs refembling a crucifix, which was ornamented with feathers, and which was erected as a monument for a deceased perfon; but they could not learn how his body was difpofed of.

On the 25th, the captain, Mr. Banks, and Doctor Solander, went on shore to shoot, when they met with a numerous family, who were among the creeks catching fish. They behaved very civilly, and received some trifling presents.

The ship's company were, on the 27th and 28th, engaged in making necessary repairs, and getting her ready for sea. The captain went on shore again, and erected another pyramid of stones, in which he put some bullets, beads, &c. as before, with the addition of a piece of silver coin, and placed part of an old pendant on the top, to distinguish it. Some of the people who had been sent out to gather celery, met with several of the natives, among whom were some women, whose husbands had lately fallen into the hands of the enemy, and they were cutting many parts of their body in the most shocking manner with sharp stones, in testimony of their excessive grief. What made this ceremony appear ridiculous as well as shocking, was, that the male Indians, who were with them, paid not the least attention to it, but with the greatest unconcern imaginable employed themselves in repairing some empty huts upon the spot.

On Tuesday the 30th, two posts were erected, inscribed with the ship's name, &c. as usual; one was placed at the watering place, with the union flag upon it, and the other in the same manner, on the island of Motuara; and the inhabitants being informed, that these posts were meant as memorials of the Endeavour having touched at this place, promised never to destroy them. The captain then named this inlet Queen Charlotte's Sound; and took possession of it in the name, and for the use of His Majesty, and a bottle of wine was drank to the Queen's health.

Towards night, on the 31st, a brisk gale arose, attended with heavy showers, and the next morning became so very tempestuous, that the Endeavour had her hawser broke, and several casks of water that had been left on shore were washed away by the rain.

The 2d, 3d, and 4th of February were chiefly spent in preparing for their departure, and purchasing fish of the natives.

On the 6th, in the morning, the Endeavour sailed out of the bay, which the ship's company, from an abhorrence of the brutal custom that prevails here of eating men, called Cannibal Bay. The natives about this sound are not above four hundred in number; they are scattered along the coast, and live upon fern-root and fish; the latter of which was the only commodity they traded in.

The Endeavour having left the sound, steered eastward, and about six o'clock in the evening they were greatly alarmed at their being carried, by the rapidity of the current, very close to one of the two islands which lie off Cape Koamaroo, at the entrance of the sound. The ship was in such imminent danger that they expected every minute she would be dashed to pieces; but letting go an anchor, and veering one hundred and sixty fathom of cable, she was brought up, when they were not above two cables length from the rocks: in this situation they were obliged to wait for the ebb of the tide, which was not till after midnight. At three o'clock in the morning they weighed anchor, and a fine breeze springing up soon after, they were carried through the streight with great velocity. At the entrance of the streight, on the north side, there is a small island, which was named Entry Island.

On the 8th they were off Cape Palliser, when they discovered that the land reached away to the north-east towards Cape Turnagain. Three canoes came off in the afternoon, with several people in them; they made a good appearance, and their canoes were ornamented like those of the Indians of the northern coast. They came on board with great alacrity. One old man was tattooed in a very remarkable manner; he was likewise marked with a streak of red paint across the nose, and over both cheeks; his hair was quite white, as well as his beard. His garment was made of flax, with



with a wrought border, under which was a kind of petticoat, made of a cloth called *Aooree Waow*; his ears were decorated with teeth and pieces of green stone.

On the 14th of February, about sixty Indians in four double canoes, came within a stone's cast of the ship, which they beheld with surprise. *Tupia* endeavoured to persuade them to approach nearer, which they refused, and made toward the shore, but did not reach it till after it was dark. From the behaviour of these people, the place from whence they came was called the Island of *Looker's-on*. They had various winds and seas till the 4th of March, when they saw several whales and seals. On the 9th they saw a ledge of rocks, and soon afterwards another ledge, three leagues from the shore, which they passed to the north during the night, and discovered the others under their bow at day-break. Thus they had a narrow escape from destruction; and these ledges of rocks were denominated *Traps*, from their being adapted to entrap the unwary.

In the morning they sailed northward, and on the day following, discovered a barren rock, about a mile in circumference, very high, and five leagues from the main land. This was called *Solander's Island*. On the 13th they discovered a bay, which contains several islands, behind which, if there be depth of water, there must be shelter from all winds. Captain Cook called this *Dusky-Bay*, and it is remarkable for having five high peaked rocks laying off it, which look like the thumb and four fingers of a man's hand; whence it was denominated *Point Five Fingers*.

They had now almost passed the whole of the north-west coast of *Tovy Poenam-moo*; the face of the country afforded nothing worth notice, but a ridge of rocks of a stupendous height, which *Dr. Hawkesworth* describes as "totally barren and naked, except where they are covered with snow, which is to be seen in large patches in many parts of them, and has probably lain there ever since the creation of the world; a prospect more rude, craggy, and desolate than this country affords from the sea cannot possibly be conceived; for as far inland as the eye can reach, nothing appears but the summits of rocks, which stand so near together, that, instead of vallies, there are only fissures between them."

By the 27th they had sailed round the whole country, and determined to depart from the coast, as soon as they had taken in a stock of water. For this purpose the captain went ashore in the long-boat, and found an excellent watering-place, and a proper birth for the ship; which being moored, they began filling their casks, while the carpenter and his crew were employed in cutting wood. A council of the officers was now held, as to the passage they should take to England; when it was resolved to return by the East Indies, and with that view to steer for the east coast of New Holland, and then follow the direction of that coast to the northward.

This resolution being taken, they sailed at day-break, on Saturday, March 31, 1770, and taking their departure from an eastern point, which they had seen on the 23d, they called it *Cape Farewell*. The bay from which they sailed was named *Admiralty Bay*, and the two capes thereof *Cape Stephens*, and *Cape Jackson*, the names of the then Secretaries to the Board of Admiralty.

*Abel Jansen Tasman*, a Dutchman, was the first European that made a discovery of New Zealand, to which he gave the name of *Staaten Land*, that is, the land of the States-General. *Tasman* never went on shore, as the Indians attacked him soon after he came to an anchor, in the bay to which he gave the name of *Murderers Bay*: this was in December 1642.

The situation of these islands is between  $34^{\circ}$  and  $48^{\circ}$  of south latitude, and  $181^{\circ}$  and  $190^{\circ}$  of west longitude. The natives call the northern island *Eaheinomauwe*, his body, and the southernmost *Tovy Poenam-moo*.

*Eaheinomauwe*,



Eaheinomauwe, though hilly, and in some places mountainous, is well stored with wood, and there is a rivulet in every valley. The soil of the valleys is light, but is so fertile, as to be well adapted for the plentiful production of all sorts of the fruits, plants, and corn of Europe. The summer is more equally warm, though not hotter than in England; and it is imagined, from the vegetables that were found, that the winter is not so severe.

Dogs and rats are the only quadrupeds that were seen, and of the latter only a very few. The inhabitants breed the dogs for the sole purpose of eating them. There are seals and whales on the coast; and they once saw a sea-lion. The birds are hawks, owls, quails; and there are song-birds, whose note is wonderfully melodious. The insects are flesh-flies, beetles, butterflies, sand-flies, and musquitoes.

Tovy Poenamoo appears to be a barren country, is very mountainous, and almost destitute of inhabitants.

The sea which washes these islands abounds with fish, which are equally delicate and wholesome food. They seldom came to anchor but they caught enough, with hook and line only, to supply the whole ship's crew; and, when they fished with nets, every mess in the ship, except those who were too indolent, salted as much as supplied them when at sea for several weeks after.

This country abounds with forests, filled with very large, straight and clean timber. Upwards of four hundred species of plants were found, all of which are unknown in England, except garden night-shade, sow-thistle, two or three kinds of fern, and one or two sorts of grass. There is only one shrub or tree in this country which produces fruit, and that is a kind of berry almost tasteless; but they have a plant which answers all the uses of hemp and flax. There are two kinds of this plant, the leaves of one of which are yellow, and the other a deep red, and both of them resemble the leaves of flags. Of these leaves they make lines and cordage, and much stronger than any thing of the kind in Europe.

The men of this country are as large as the largest Europeans. Their complexion is brown, but little more so than that of a Spaniard. They are full of flesh, but not lazy and luxurious; and are stout and well-shaped. The women possess not that delicacy which distinguishes the European ladies; but their voice is singularly soft, which, as the dress of both sexes is similar, chiefly distinguishes them from the men. They have neither black cattle, sheep, hogs, nor goats; so that their chief food being fish, and that not at all times to be obtained, they are in danger of dying through hunger. They have a few, and but a very few dogs; and when no fish is to be got, they have only vegetables, such as yams and potatoes, to feed on; and if by any accident these fail them, their situation must be deplorable. This will account for their shocking custom of eating the bodies that are slain in battle; for he who fights through mere hunger, will not scruple to eat the adversary he has killed.

The inhabitants of New Zealand are as modest and reserved in their behaviour and conversation as the most polite nations of Europe. The women indeed were not dead to the softer impressions; but their mode of consent was, in their idea, as harmless as the consent to marriage with us, and equally binding for the stipulated time. If any of the English addressed one of their women, he was informed, that the consent of her friends must be obtained, which usually followed on his making a present. This done, he was obliged to treat his temporary wife at least as delicately as we do in England. A gentleman who failed in the Endeavour, having addressed a family of some rank, received an answer, of which the following is an exact translation—"Any of these young ladies will think themselves honoured by your addresses, but you must first make  
me

me a suitable present, and you must then come and sleep with us on shore, for day-light must by no means be a witness of what passes between you."

These Indians anoint their hair with oil melted from the fat of fish or birds. Both sexes, but the men more than the women, mark their bodies with black stains, called amoco. Exclusive of the amoco, they mark themselves with furrows. These furrows make a hideous appearance, the edges being indented, and the whole quite black. The paintings on their bodies resemble fillagree work, and the foliage in old chased ornaments; but no two are painted exactly after the same model. The people of New Zealand frequently left the breech free from these marks, which the inhabitants of Otaheite adorned beyond any other.

Their dress is formed of the leaves of the flag split into slips, which are interwoven, and made into a kind of matting, the ends, which are seven or eight inches in length, hanging out on the upper side. One piece of this matting being tied over the shoulders reaches to the knees; the other piece being wrapped round the waist, falls almost to the ground.

The women never tie their hair on the top of their head, nor adorn it with feathers; and are less anxious about dress than the men. Their lower garment is bound tight round them, except when they go a fishing, and then they are careful that the men shall not see them.

The ears of both sexes are bored, and the holes stretched so as to admit a man's finger. The ornaments of their ears are feathers, cloth, bones, and sometimes bits of wood. They likewise hung to their ears, by strings, chisels, bodkins, the teeth of dogs, and the teeth and nails of their deceased friends. The men wear a piece of green talc, or whalebone, with the resemblance of a man carved on it, hanging to a string round the neck. They saw one man who had the gristle of his nose perforated, and a feather being passed through it, projected over each cheek.

These people shew less ingenuity in the structure of their houses, than in any thing else belonging to them; they are from sixteen to twenty-four feet long, ten or twelve wide, and six or eight in height. The frame is of slight sticks of wood, and the walls and roof are made of dry grass pretty firmly compacted. Some of them are lined with the bark of trees, and the ridge of the house is formed by a pole, which runs from one end to the other. The door is only high enough to admit a person crawling on hands and knees, and the roof is sloping. There is a square hole near the door, serving both for window and chimney, near which is the fire-place.

Some who can afford it, and whose families are large, have three or four houses inclosed within a court-yard. Their clothes, arms, feathers, some ill made tools, and a chest, in which all these are deposited, form all the furniture of the inside of the house. Their hammers to beat fern-root, gourds to hold water, and baskets to contain provisions, are placed without the house.

The canoes of this country are not unlike the whale-boats of New England, being long and narrow. The larger sort seem to be built for war, and will hold from thirty to one hundred men. One of these, at Tolaga, measured near seventy feet in length, six in width, and four in depth. It was sharp at the bottom, and consisted of three lengths, about two or three inches thick, and tied firmly together with strong plaiting; each side was formed of one entire plank, about twelve inches broad, and about an inch and a half thick, which were fitted to the bottom part with equal strength and ingenuity. Several thwarts were laid from one side to the other, to which they were securely fastened, in order to strengthen the whole.

These vessels are rowed with a kind of paddles, between five and six feet in length, the

the blade of which is a long oval, gradually decreasing till it reaches the handle; and the velocity with which they row with these paddles is really surprising. The vessels are steered by two men, having each a paddle, and sitting in the stern; but they can only sail before the wind, in which direction they move with considerable swiftness.

These Indians use axes, adzes and chissels, with which last they likewise bore holes. The chissels are made of jasper, or of the bone of a man's arm; and their axes and adzes of a hard black stone. They use their small jasper tools till they are blunted, and then throw them away, having no instrument to sharpen them with.

Their warlike weapons are spears, darts, battle-axes, and the patoo-patoo. The spear, which is pointed at each end, is about sixteen feet in length, and they hold it in the middle, so that it is difficult to parry a push from it. Whether they fight in boats or on shore, the battle is hand to hand, so that they must make bloody work of it.

When they came to attack the English, there was usually one or more thus distinguished in each canoe. It was their custom to stop at about fifty or sixty yards distance from the ship, when the commanding officer, arising from his seat, and putting on a garment of dog's skin, used to direct them how to proceed. When they were too far from the ship to reach it either with stone or lance, they cried out, *Haromai, haromai, harre uta a patoo-patoo oge*—"Come to us, come on shore, and we will kill you all with our patoo-patoos." During these menaces they approached the ship, till they came alongside, talking peaceably at intervals, and answering whatever questions they were asked. Then again their threats were renewed, till imagining the sailors were afraid of them, they began the war-song and dance, and threw stones on board the ship.

In the war-dance their motions are numerous, their limbs are distorted, and their faces are agitated. Their tongue hangs out of their mouths to a vast length, and their eye-lids are drawn so as to form a circle round the eye; they shake their darts, brandish their spears, and wave their patoo-patoos to and fro in the air. They accompany this dance with a song, which is sung in concert; every strain ending with a loud and deep sigh. There is an activity and vigour in their dancing, which is truly admirable; and their idea of keeping time in music is such, that sixty or eighty paddles will strike at once against the sides of their boats, and make only one report.

With regard to religion, they acknowledge one superior being, and several subordinate. Their mode of worship could not be learned, nor was any place proper for that purpose seen.

A great similitude was observed between the dress, furniture, boats and ~~parts~~ of the New Zealanders, and those of the inhabitants of the South Sea islands, which furnished a strong proof, that the common ancestors of both were natives of the same country. Indeed the inhabitants of these different places have a tradition that their ancestors migrated from another country many ages since; and they both agree, that this country was called Heawige. But perhaps a yet stronger proof that their origin was the same, will arise from the similitude of their language, of which the following is a specimen:

## New Zealand.

*Whabine,*  
*Taata,*  
*Mata,*  
*Aberwh,*  
*Paparinga,*  
*Ateraboo,*  
*Apeto,*  
*Heromai,*

## Otaheite.

*Abeinc,*  
*Tata,*  
*Matau,*  
*Eaboo,*  
*Paparea,*  
*Eoboo,*  
*Pito,*  
*Harre mai,*

A woman.  
People.  
The eyes.  
The nose.  
The cheeks.  
The belly.  
The navel.  
Come hither.

They

They sailed from Cape Farewell on the 31st of March, 1770, and had fine weather and a fair wind till the 9th of April, when they saw a tropic-bird. On the 15th they saw an egg-bird and a gannet; and on the day following a small land-bird perched on the rigging, from which they concluded they were near land; but they found no ground with one hundred and twenty fathom. At six o'clock in the morning of the 19th, they discovered land four or five leagues distant; the southernmost part of which was called Point Hicks, in compliment to Mr. Hicks, the first lieutenant, who made the discovery of it. At noon they discovered another point of the same land, rising in a round hillock, extremely like the Ram Head at the entrance of Plymouth Sound, for which reason Captain Cook gave it the same name. What they had yet seen of the land was low and even, and the inland parts were green, and covered with wood. They now saw three water-spouts at the same time, one of which continued a quarter of an hour. On Sunday, the 22d, they were so near the shore, as to see several of the inhabitants on the coast, who were of a very dark complexion, if not perfect negroes.

On the 27th they saw several of the inhabitants walking along the shore, four of them carrying a canoe on their shoulders; but as they did not attempt coming off to the ship, the captain took Messrs. Banks and Solander and Tupia in the yawl, and employed four men to row them to that part of the shore where the natives appeared, near which four small canoes laid close in-land. The Indians sat on the rocks till the yawl was within a quarter of a mile of the shore, and then ran away into the woods. The surf beating violently on the beach, prevented the boat from landing.

At five in the evening they returned to the ship, and a light breeze springing up, they sailed to the northward, where they discovered several people on shore. They brandished their weapons, and threw themselves into threatening attitudes. The bodies, thighs, and legs of two of these, were painted with white streaks, and their faces were almost covered with a white powder. They talked to each other with great emotion, and each of them held a kind of cimeter in his hand.

They anchored opposite a village of about eight houses, and observed an old woman and three children to come out of a wood, laden with fuel for a fire: all of them, as well as the woman, were quite naked. The old woman frequently looked at the ship with the utmost indifference, and, as soon as she had made a fire, they set about dressing their dinner with as much composure as if a ship had been no extraordinary sight.

Having formed a design of landing, they manned the boats, and took Tupia with them; and they had no sooner come near the shore, than two men advanced, as if to dispute their setting foot on land. The captain threw them beads, nails, and other trifles, which they took up, and seemed to be delighted with. He then made signs that he wanted water, and used every possible means to convince them that no injury was intended. They now made signs to the boat's crew to land, on which they put the boat in; but they had no sooner done so, than the two Indians came again to oppose them. A musquet was now fired between them, on the report of which one of them dropt a bundle of lances, which he instantly snatched up again in great haste. One of them then threw a stone at the boat, on which the captain ordered a musquet loaded with small shot to be fired, which wounding the eldest of them on the legs, he retired hastily to one of their houses, which stood at some little distance. The people in the boats now landed, imagining that the wound which this man had received would put an end to the contest; in this, however, they were mistaken, for he immediately returned with a kind of shield, of an oval figure, painted white in the middle, with two

holes cut in it to see through. They now advanced with great intrepidity, and both discharged their lances at the boat's crew, but did not wound any of them. Another musquet was now fired at them, on which they threw another lance, and then took to their heels. The crew now went up to the huts, in one of which they found the children, who had secreted themselves behind some bark. They looked at them, but left them without their knowing they had been seen; and having thrown some pieces of cloth, ribbons, beads, and other things into the hut, they took several of their lances, and reembarked in the boat.

They now sailed to the north point of the bay, where they found a plenty of fresh water. On taking a view of the hut where they had seen the children, they had the mortification to find that every Indian was fled, and that they had left all the presents behind them. Some men having been sent to get wood and water, they no sooner came on board to dinner, than the natives came down to the place, and examined the casks with great attention, but did not offer to remove them. In the evening Messrs. Banks and Solander went with the captain to a cove north of the bay, where they caught between three and four hundred weight of fish in four hauls.

On Tuesday, May the 1st, the south point of the bay was named Sutherland Point, one of the seamen, of the name of Sutherland, having died that day, and been buried on shore. This day Messrs. Banks, Solander, the captain, and a few other gentlemen, went on shore, and left more presents in the huts, such as looking-glasses, combs, &c. but the former ones had not been taken away. They saw the dung of an animal which fed on grass, and traced the footsteps of another, which had claws like a dog, and was probably about the size of a wolf: they discovered the track of a small animal, whose foot was like that of a pole-cat; and saw one animal alive, about the size of a rabbit.

The second lieutenant, Mr. Gore, having been with a boat to dredge for oysters, saw some Indians, who made signs for him to come on shore, which he declined. Having finished his business, he sent the boat away, and went by land with a midshipman, to join the party that was getting water. In their way they met with more than twenty of the natives, who followed them so close, as to come within a few yards of them. Mr. Gore stopped and faced them; on which the Indians stopped also, and when he proceeded again they followed him; but they did not attack him, though they had each man his lance. The Indians coming in sight of the waterers, stood still at the distance of a quarter of a mile, while Mr. Gore and his companions reached their shipmates in safety.

Tupia having learnt to shoot, frequently strayed alone to shoot parrots; and the Indians constantly fled from him with as much precipitation as from the English. On the 3d of May, fourteen or fifteen Indians, in the same number of canoes, were engaged in striking fish within half a mile from the watering-place.

They now returned to their boat, and seeing a fire at a distance, rowed towards it, but the Indians fled at their approach. Near the beach they found seven canoes, and as many fires, from whence they judged that each fisherman had dressed his own dinner. There were oysters lying on the spot, and some muscles roasting on the fire. They ate of these fish, and left them some beads and other trifles in return. They now returned to the ship.

They fished with great success this day, and the second lieutenant struck what is called the sting-ray, which weighed near two hundred and fifty pounds. The next morning a fish of the same kind was caught, which weighed three hundred and fifty pounds.

While Captain Cook remained in the harbour, the English colours were displayed on shore daily, and the name of the ship, with the date of the year, was carved on a tree near the place where they took in their water.

They sailed from Botany Bay on the 6th of May, 1770; at noon were off a harbour which they called Port Jackson, and in the evening, near a bay, to which they gave the name of Broken Bay.

On Sunday the 13th, they saw the smoke of many fires on a point of land, which was therefore called Smoky Cape. As they proceeded northward from Botany Bay, the land appeared high and well covered with wood. On Tuesday morning, by the assistance of their glasses, they discovered about a score of the Indians, each loaded with a bundle, which they imagined to be palm-leaves to thatch their houses. At noon the captain discovered a high point of land, which he called Cape Byron.

They had, for some days past, seen the sea-birds, called boobies, none of which they had met with before; and which, from half an hour before sun-rising to half an hour after, were continually passing the ship in large flights; from which it was conjectured, that there was a river or inlet of shallow water to the southward, where they went to feed in the day, returning in the evening to some islands to the northward. In honour of Captain Hervey, this bay was called Hervey's Bay.

The captain and Tupia, with a party, went on shore the 23d. They landed a little within the point of a bay, which led into a large lagoon, by the sides of which grows the true mangrove, as it also does on some bogs and swamps of salt water which they discovered. There were many nests of a singular kind of ant, as green as grass, in the branches of these mangroves. When the branches were disturbed, they came forth in great numbers, and bit the disturber most severely. These trees likewise afforded shelter for immense numbers of green caterpillars; their bodies were covered with hairs, which, on the touch, gave a pain similar to the sting of a nettle, but much more acute. These insects ranged themselves side by side on the leaves, thirty or forty together, in a very regular manner. They saw, among the sand banks, many birds larger than swans, which they imagined were pelicans; and they shot a kind of bustard, which weighed seventeen pounds. This bird proved very delicate food, and gave name to the place, which was called Bustard Bay. They likewise shot a duck of a most beautiful plumage, with a white beak. They found vast numbers of oysters of various sorts, and, among the rest, some hammer oysters of a curious kind. While the gentlemen were in the woods, several of the natives came down and took a survey of the ship, and then departed. They sailed the next morning, and on the day following were abreast of a point, which lying immediately under the tropic, the captain called Cape Capricorn, on the west side of which they saw an amazing number of large birds resembling the pelican, some of which were near five feet high.

On the 27th, in the morning they sailed to the northward, and to the northernmost point of land the captain gave the name of Cape Manifold, from the number of high hills appearing above it. Between this cape and the shore is a bay called Keppel's Bay, and some islands bearing the name of the same gentleman. In this place the captain intended to lay the ship ashore and clean her bottom; and accordingly landed, in search of a proper place for the purpose.

In this excursion Messrs. Banks and Solander attended Captain Cook. They found walking extremely incommodious, the ground being covered with grass, the seeds of which were sharp, and bearded, so that they were continually sticking in their clothes, whence they worked forwards to the flesh, by means of the beard. They were like-

wife

wife tormented with the perpetual stinging of musquitoes. In the interior parts of the country they found gum-trees, on the branches of which were white ants nests formed of clay, as big as a bushel. On another tree they found black ants, which formed their lodging in the body of it, after they had eaten away the pith; yet the trees were in a flourishing condition. They found butterflies in such incredible numbers, that whatever way they looked, many thousands were to be seen in the air, while every bough and twig was covered with multitudes. They likewise discovered on dry ground, where it was supposed to have been left by the tide, a fish about the size of a minnow, having two strong breast fins, with which it leaped away as nimbly as a frog: it did not appear to be weakened by being out of water, nor even to prefer that element to the land; for when seen in the water it leaped on shore, and pursued its way. It was likewise remarked, that where there were small stones projecting above the water, it chose rather to leap from one stone to another, than to swim. There was no good water to be found here, therefore they did not lay the ship ashore as they intended.

On Tuesday, they saw very large columns of smoke rising from the low lands. This day they gave name to Cleveland Bay, the east point of which was called Cape Cleveland, and the west Magnetical Isle, because the compass did not traverse well when they were near it. Hence they ranged northward along the shore, towards a cluster of islands, on one of which about forty men, women, and children were standing together, and looking at the ship with a curiosity never observed among these people before. Here Messrs. Banks and Solander went on shore with the captain, whose chief view was to procure water, which not being easily to be got, they soon returned on board, and the next day arrived near Trinity Bay, which was so called, because it was discovered on Trinity Sunday.

As no accident remarkably unfortunate had befallen our adventurers, during a navigation of more than thirteen hundred miles, upon a coast every where abounding with the most dangerous rocks and shoals, no name expressive of distress had hitherto been given to any cape or point of land which they had seen. But they now gave the name of Cape Tribulation to a point which they had just discovered, as they here became acquainted with misfortune.

This cape is in  $16^{\circ} 6'$  south latitude, and  $214^{\circ} 39'$  west longitude.

To avoid the danger of some rocks they shortened sail and kept standing off from six o'clock in the evening till near nine, with a fine breeze and bright moon. They had got from fourteen into twenty-one fathom water; when suddenly they fell into twelve, ten, and eight fathom, in a few minutes. Every man was instantly ordered to his station, and they were on the point of anchoring, when, on a sudden, they had again deep water, so that they thought all danger was at an end, concluding they had sailed over the tail of some shoals which they had seen in the evening. They had twenty fathom and upwards before ten o'clock, and this depth continuing some time, the gentlemen, who had hitherto been upon deck, retired to rest; but in less than an hour the water shallowed at once from twenty to seventeen fathom, and before soundings could be again taken, the ship struck against a rock, and remained fixed, but from the motion given her from the beating of the surge. Every one was instantly on deck, with countenances fully expressive of the agitation of their minds. As they knew they were not near the shore, they concluded they had struck against a rock of coral, the points of which being sharp, and the surface so rough, as to grind away whatever is rubbed against it, though with a gentle motion, they had reason to dread the horror of their situation!



The sails being taken in, and boats hoisted out to examine the depth of water, they found that the ship had been carried over a ledge of the rock, and lay in a hollow within it. Finding that the water was deepest astern, they carried out the anchor from the starboard quarter, and applied their whole force to the capstern, in hopes to get the vessel off, but in vain. She beat so violently against the rock, that the crew could scarcely keep on their legs. The moon now shone bright, by the light of which they could see the sheathing boards float from the bottom of the vessel; till at length the false keel followed, so that they expected instant destruction. Their best chance of escaping seemed now to be by lightening her; but as they had struck at high water, they would have been but in their present situation, after the vessel should draw as much less water as the water had sunk; but their anxiety abated a little, on finding that the ship settled to the rocks as the tide ebbed. They, however, flattered themselves that if the ship should keep together till next tide, they might have some chance of floating her. They therefore instantly started the water in the hold, and pumped it up. The decayed stores, oil-jars, casks, ballast, six of their guns, and other things, were thrown over-board, in order to get at the heavier articles; and in this business they were employed till day-break, during all which time it was observed, that not an oath was sworn; so much were the minds of the sailors impressed with a sense of their danger.

At day-light they saw land at eight leagues distance; but not a single island between them and the main, on which part of the crew might have been landed, while the boat went on shore with the rest; so that the destruction of the greater part of them would have been inevitable, had the ship gone to pieces. It happened, however, that the wind died away to a dead calm before noon. As they expected high water at eleven o'clock, every thing was prepared to make another effort to free the ship; but the tide fell so much short of that in the night, that she did not float by eighteen inches, though they had thrown overboard near fifty tons weight; they now, therefore, renewed their toil, and threw overboard every thing that could be possibly spared. As the tide fell, the water poured in so rapidly, that they could scarcely keep her free by the constant working of two pumps. Their only hope now depended on the midnight tide, and preparations were accordingly made for another effort to get the ship off. The tide began to rise at five o'clock, when the leak likewise increased to such a degree, that two more pumps were manned; but only one of them would work; three, therefore, were kept going till nine o'clock, at which time the ship righted; but so much water had been admitted by the leak, that they expected she would sink as soon as the water should bear her off the rock. Their situation was now deplorable beyond description; and the imagination must paint what would baffle the powers of language to describe. They knew that when the fatal moment should arrive, all authority would be at an end. The boats were incapable of conveying them all on shore; and they dreaded a contest for the preference, as more shocking than the shipwreck itself; yet it was considered, that those who might be left on board, would eventually meet with a milder fate than those who, by gaining the shore, would have no chance but to linger the remains of life among the rudest savages in the universe, and in a country, where fire-arms would barely enable them to support a wretched existence.

At twenty minutes after ten the ship floated, and was heaved into deep water; when they were happy to find she did not admit more water than she had done before; yet as the leak had for a considerable time gained on the pumps, there was now three feet nine inches water in the hold. By this time the men were so worn by fatigue of mind and





and body, that none of them could pump more than five or six minutes at a time, and then three or four minutes spent, on the deck, amidst a stream of water which came from the pumps. The succeeding man being fatigued in his turn, threw himself down in the same manner, while the former jumped up and renewed his labour, thus mutually struggling for life, till the following accident had like to have given them up a prey to absolute despair.

Between the inside lining of the ship's bottom, which is called the ceiling, and the outside planking, there is a space of about seventeen or eighteen inches. The man who had hitherto taken the depth of water at the well, had taken it no farther than the ceiling; but being now relieved by another person, who took the depth to the outside planking, it appeared by this mistake, that the leak had suddenly gained upon the pumps, the whole difference between the two plankings. This circumstance deprived them of all hopes, and scarce any one thought it worth while to labour for the longer preservation of a life which must so soon have a period. But the mistake was soon discovered; and the joy arising from such unexpected good news inspired the men with so much vigour, that before eight o'clock in the morning they had pumped out considerably more water than they had shipped. They now talked confidently of getting the ship into some harbour, and set heartily to work to get in their anchors; one of which, and the cable of another, they lost: but these were now considered as trifles. Having a good breeze from the sea, they got under sail at eleven o'clock, and stood for the land.

As they could not discover the exact situation of the leak, they had no prospect of stopping it within side of the vessel; but the following expedient, which one of the midshipmen had formerly seen tried with success, was adopted. They took an old studding-sail, and having mixed a large quantity of oakum and wool, chopped small, it was stitched down in handfuls on the sail, as lightly as possible; the dung of their sheep and other filth being spread over it. Thus prepared, the sail was hauled under the ship by ropes, which kept it extended till it came under the leak, when the suction carried in the oakum and wool from the surface of the sail. This experiment succeeded so well, that instead of three pumps, the water was easily kept under with one.

They hitherto had no further view than to run the ship into an harbour, and build a vessel from her materials, in which they might reach the East Indies; but they now began to think of finding a proper place to repair her damage, and then to pursue their voyage on its original plan. At six in the evening they anchored seven leagues from the shore; and found that the ship made fifteen inches water an hour during the night; but as the pumps could clear this quantity, they were not uneasy. At nine in the morning they passed two islands, which were called Hope Islands, because the reaching of them had been the object of their wishes at the time of the shipwreck. In the afternoon the master was sent out with two boats to sound, and search for a harbour where the ship might be repaired. They anchored at sun-set in four fathom, two miles from the shore. One of the mates, being out in the pinnace, returned at nine o'clock, reporting that he had found just such a harbour as was wanted, at the distance of two leagues.

At six o'clock the next morning they sailed, having previously sent two boats a-head, to lie on the shore, that they saw in the distance. They soon anchored about a mile from the shore, where the channel was very narrow, but the harbour was better adapted to their present purpose than any place they had seen in the whole course of their voyage. As it blew very fresh this day and the following

night,

night, they could not venture to run into the harbour, but remained at anchor during the two succeeding days, in the course of which they observed four Indians on the hills, who stopped and made two fires.

The men by this time began to be afflicted with the scurvy, and their Indian friend, Tupia, was so bad with it, that he had livid spots on both his legs. Mr. Green, the astronomer, was likewise ill of the same disorder; so that their being detained from landing was every way disagreeable. The wind continued fresh till Sunday the 17th, but they then resolved to push in for the harbour, and twice run the ship a-ground; the second time of which she stuck fast; on which they took the bottoms, fore-yards, and fore top-masts down, and made a raft on the side of the ship; and, as the tide happened to be rising, she floated at one o'clock. She was now soon got into the harbour, where she was moored along the side of a beach, and the anchors, cables, &c. immediately taken out of her.

On Monday morning they erected a tent for the sick, several of whom were brought on shore as soon as it was ready for their reception. They likewise built a tent to hold the provisions and stores, which were landed the same day. The boat was now dispatched in search of fish for the refreshment of the sick, but she returned without getting any; but Tupia employed himself in angling, and living entirely on the produce of his industry, recovered his health very fast. Mr. Banks, in an excursion up the country, saw the frames of several Indian houses, which appeared to have been abandoned some time: while the captain, having ascended one of the highest hills, observed the high land to be stony and barren, and the low land near the river over-run with mangroves, among which the salt water flowed every tide.

On Tuesday the captain ordered the smith's forge to be set up, and directed the armourer to prepare the necessary iron work for the repair of the vessel. He likewise ordered out the officers stores, water, &c. in order to lighten the ship. This day Mr. Banks crossed the river to view the country, which was little else than sand-hills. He saw vast flocks of crows and pigeons, of the latter of which he shot several, which were most beautiful birds. On the day following, as they were removing the coals, the water rushed in, near the foremast, about three feet from the keel; so that it was resolved to clear the hold entirely; wherefore they took out all the coals, and the next day warped the ship higher up the harbour, to a station proper for laying her a-shore in order to stop the leak.

Early in the morning of the 22d the tide left the ship, and they proceeded to examine the leak, when they found that the rocks had cut through four planks into the timbers, and that three other planks were damaged. In these breaches not a splinter was to be seen, the whole being smooth, as if cut away by an instrument; but the preservation of the vessel was owing to a very singular circumstance. One of the holes was large enough to have sunk her, even with eight pumps constantly at work; but this hole was in a great measure stopped up by the fragment of the rock being left sticking in it. They likewise found some pieces of oakum, wool, &c. which had got between the timbers, and stopped many parts of the leak which had been left open by the stone. Exclusive of the leak, great damage was done to various parts of the ship's bottom.

While the smiths were engaged in making nails and bolts, the carpenters began to work on the vessel; and some of the crew were sent across the river to shoot pigeons for the sick. These people found a stream of fresh water, discovered many Indian houses, and had sight of a mouse-coloured animal, extremely swift, and about the size of a greyhound. On the 23d they saw plenty of fish, but caught only three. This day

day many of the crew saw the animal above-mentioned ; and one of the seamen declared he had seen the devil, which he described in the following words : " He was as large," says he, " as a one-gallon keg, and very like it ; he had horns and wings, yet he crept so slowly through the grass, that if I had not been *afraid*, I might have touched him." It appeared afterwards, that this poor fellow had seen a bat, which is almost black, and as large as a partridge ; and his own apprehensions had furnished his devil with horns.

The captain and Mr. Banks saw the animal above-mentioned, which had a long tail that it carried like a greyhound : it leaped like a deer, and the print of its foot resembled that of a goat.

The vessel was now in a position which threw all the water abaft ; and Mr. Banks having removed his whole collection of plants into the bread-room, they were this day found under water, by which some of them were totally destroyed ; but, by great care, most of them were restored to a state of preservation.

On the 29th, the boat took as many fish as allowed a pound and a half to each man. A midshipman saw a wolf exactly resembling those of America. Mr. Gore also saw two straw-coloured animals, of the size of a hare, but shaped like a dog. So much fish was taken, that each man had two pounds and a half ; and plenty of greens were gathered, which being boiled with the pease, their fare was deemed excellent.

Cockles were found by the master so large, that one of them was more than sufficient for two men ; and likewise plenty of other shell-fish, of which he brought a supply to the ship. This day they succeeded in an attempt to float the ship ; when they found that, by the position she had lain in, she had sprung a plank, so that it was again necessary to lay her ashore. An alligator swam by the ship several times this day.

Mr. Banks and a party made an excursion up a river, and on the 8th they saw several animals, one of which was judged to be a wolf. At night they made a fire, and took up their quarters on the banks of the river ; but the night was rendered extremely disagreeable by the stings of the musquitoes, which pursued them into the smoke, and almost into the fire. At break of day they set out in search of game, and saw four animals, two of which were chased by Mr. Banks's greyhound ; but they greatly outstripped him in speed, by leaping over the long thick grass, which incommoded the dog in running. It was observed of this animal, that he leaped or bounded forward on two legs, instead of running on four.

The tide favouring their return, they lost no time in getting back to the ship. The master, who had been seven leagues at sea, returned soon after Mr. Banks, bringing with him three turtle, which he took with a boat-hook, and which together weighed near eight hundred pounds.

In the morning four Indians, in a small canoe, were within sight. They soon came quite alongside the ship ; and having received presents, landed where Tupia and a few sailors were on shore. They had each two lances, and a stick with which they throw them. Advancing towards the English, Tupia persuaded them to lay down their arms, and sit by him, which they readily did. They staid with him till dinner-time, when he made signs of invitation for them to go to the ship and eat ; but this they declined, and retired in their canoe.

These men were of the common stature, with very small limbs ; their complexion a deep chocolate ; their hair black, either lank or curled, but not of the wool kind.

The visit of three of these Indians was renewed the next morning, and they brought with them a fourth, whom they called Yaparico, who appeared to be a person of some consequence. The bone of a bird, about six inches long, was thrust through the gristle of

of his nose : and indeed all the inhabitants of this place had their noses bored, for the reception of such an ornament. These people being quite naked, the captain gave one of them an old shirt, which he bound round his head like a turban, instead of using it to cover any part of his body. They suddenly leaped into their canoe, and rowed off, from a jealousy of some of the gentlemen who were examining it. The canoe was about ten feet long, and calculated to hold four persons ; and when it was in shallow water they moved it by means of poles.

On the 14th, Mr. Gore shot one of the mouse-coloured animals above-mentioned. It chanced to be a young one, weighing no more than thirty-eight pounds ; but when full grown they are as large as a sheep. The skin of this beast, which is called kangaroo, is covered with short fur, and is of a dark mouse-colour ; the head and ears are somewhat like those of a hare : this animal was dressed for dinner, and proved fine eating.

The natives being now become familiar with the ship's crew, one of them was desired to throw his lance, which he did with such dexterity and force, that though it was not above four feet from the ground at the highest, it penetrated deeply into a tree at the distance of fifty yards. The natives now went on board the ship, and were well pleased with their entertainment. On the 19th they saw several of the women, who, as well as the men, were quite naked. They were this day visited by ten of the natives, who seemed resolved to have one of the turtle that was on board, which they repeatedly made signs for, and being as repeatedly refused, they expressed the utmost rage and resentment ; and one of them, in particular, having received a denial from Mr. Banks, he stamped, and pushed him away in the most violent manner. At length they laid hands on two of the turtles, and drew them to the side of the ship where the canoe lay ; but the sailors took them away. They made several similar attempts, but being equally unsuccessful they leaped suddenly into their canoe, and rowed off. At this instant the captain, with Mr. Banks, and five or six seamen, went ashore, where they arrived before the Indians, and where many of the crew were already employed. As soon as the Indians landed, one of them snatched a fire-brand from under a pitch-kettle, and running to the windward of what effects were on shore, set fire to the dry grass, which burnt rapidly, scorched a pig to death, burnt part of the smith's forge, and would have destroyed a tent of Mr. Banks's, but that some sailors came from the ship just in time to get it out of the way of the flames. In the interim the Indians went to a place where the fishing-nets lay, and a quantity of linen was laid out to dry, and there again set fire to the grass, in spite of all persuasion, and even of threats. A musket loaded with small shot was now fired, and one of them being wounded, they ran off. This second fire was easily extinguished, but the other burnt far into the woods.

The natives continuing still in fight, a musket charged with ball was fired near them ; upon hearing which, they soon got out of fight ; but their voices being soon heard in the woods, and seeming to come nearer, the captain, with a few of the men, went to meet them. When they were in sight of each other, both parties stopped, except an old Indian, who advanced before the rest a little way, but soon halted, and speaking a few words retreated to his brethren, and they all retired together. The English having seized some of their darts, followed them about a mile, and then sat down, the Indians sitting about an hundred yards from them. The old man again came forward, having in his hand a lance with a point. He stopped and spoke several times, on which the captain made signs of friendship. The old Indian now turned to his companions, and having spoken to them, they placed their lances against a tree, and came forward as in friendship ;



friendship; whereupon their darts, which had been taken, were returned, and the whole quarrel seemed to be at an end. When Captain Cook got on board, he saw the woods burning at the distance of two miles.

The master having been sent to search for a passage to the northward, returned with an account that he could not find any. By the night of the 20th, the fire had extended many miles round them on the hills. On the 22d they killed a turtle, through both shoulders of which stuck a wooden harpoon, which the Indians had stricken it with, and the wound was quite healed. The next day one of the seamen, who had strayed from his company, met with four Indians at dinner: he was alarmed at this unexpected meeting, but had prudence enough to conceal his apprehensions, and sitting down by them, gave them his knife, which having all looked at, they returned. He would then have left them; but they chose to detain him, till, by feeling his hands and face, they were convinced he was made of flesh and blood like themselves. They then dismissed him, directing him the nearest way to the ship.

On the 26th, Mr. Banks caught a female animal, called the opossum, with two young ones.

On the 4th of August they put to sea, the pinnace going a-head to keep sounding, and at noon came to an anchor, when the captain gave the name of Cape Bedford to the northernmost point of land in sight, and that of Endeavour River to the harbour which they had quitted.

The provisions they obtained while in this harbour consisted of turtle, which they went some miles to sea to catch; oysters of three different sorts, large cavalhe or scomber, large mullets, some flat fish, a great number of small scombri, and skate or ray-fish; purslain, wild-beans, the tops of cocoas, and cabbage-palms. Of quadrupeds there are goats, wolves, and pole-cats, and a spotted animal of the viverra kind; and several kinds of serpents, only some of which are venomous. Dogs are the only tame animals.

On the 4th, such a quantity of fish was caught, as allowed a dividend of two pounds to each man. During the six following days they struggled incessantly to sail safely past the shoals and breakers, by which they were every way surrounded. On the 10th they were between a head-land and three islands, which had been discovered on the preceding day, and began to conceive hopes that they were out of danger; but this not proving the case, the head-land received the name of Cape Flattery.

After a conversation held among the officers, it was their concurrent opinion, that it would be best to leave the coast, and stand out to sea; and in consequence of these sentiments, they sailed on the 13th of August, 1770, and got in an open sea, after having been surrounded by dreadful shoals and rocks for near three months. They had now sailed above a thousand miles, during all which run they had been obliged to keep sounding without the intermission of a single minute; a circumstance which, it is supposed, never happened to any ship but the Endeavour.

Having anchored on the 14th, they steered a westerly course on the following day to get sight of the land, that a passage between that land and New Guinea might not be missed, if there was any such passage. They stood northward till midnight. When day-light came on they saw a dreadful surf break at a vast height, within a mile of the ship, towards which the rolling waves carried her with great rapidity. Thus distressed, the boats were sent ahead to tow, and the head of the vessel was brought about, but not till she was within one hundred yards of the rock, between which and her there was nothing left but the chasm, made by the last wave which had washed her side, and

which had risen and broke to a wonderful height on the rock ; but, in the moment they expected instant destruction, a breeze, hardly discernible, aided the boats in getting the vessel in an oblique direction from the rock. The hopes, however, afforded by this providential circumstance, were destroyed by a perfect calm, which succeeded in a few minutes ; yet the breeze once more returned before they had lost the little ground which had been gained.

At this time a small opening was seen in the reef, and a young officer being sent to examine it, found that its breadth did not much exceed the length of the ship, but that there was smooth water on the other side of the rocks. Animated by the hope of preserving life, they now attempted to pass the opening ; but this was impossible ; for it having become high water in the interim, the ebb tide rushed through it with amazing impetuosity, carrying the ship about a quarter of a mile from the reef, and she soon reached the distance of two miles by the help of the boats. When the ebb tide was spent, the tide of flood again drove the vessel very near the rocks ; so that their prospect of destruction was renewed, when they discovered another opening, and a light breeze springing up, they entered it, and were driven through it with a rapidity that prevented the ship from striking against either side of the channel. The ship now came to an anchor, and her crew were grateful for having regained a station which they had been very lately most anxious to quit.

The name of Providential Channel was given to the opening through which the ship had thus escaped the most imminent dangers. A high promontory on the main land in sight was denominated Cape Weymouth, and a bay near it Weymouth Bay. This day the boats went out to fish, and met with great success, particularly in catching cockles ; some of which were of such an amazing size, as to require the strength of two men to move them. Mr. Banks likewise succeeded in his search for rare shells, and different kinds of coral.

On the 21st several islands were discovered, which were called York Isles. In the afternoon they anchored between some islands, and observed that the channel now began to grow wider. They observed two distant points, between which no land could be seen ; so that the hope of having at length explored a passage into the Indian Sea began to animate every breast.

The captain and his company now ascended a hill upon one of these islands, from whence they had a view of near forty miles, in which space there was nothing that threatened to oppose their passage ; so that the certainty of a channel seemed to be almost ascertained. Previous to their leaving the island, Captain Cook displayed the English colours, and took possession of all the eastern coast of the country, from the thirty-eighth degree of south latitude, to the present spot, by the name of New South Wales, for his Sovereign the King of Great Britain ; and the place received the name of Possession Island.

They were now advanced to the northern extremity of New Holland, and had the satisfaction of viewing the open sea to the westward. The north-east entrance of the passage is formed by the main land of New Holland, and by a number of islands, which took the name of the Prince of Wales's Islands, and which Captain Cook imagines may reach to New Guinea. To the passage which they had sailed through, Captain Cook gave the name of Endeavour Straights.

New South Wales is a much larger country than any hitherto known, which is not deemed a continent, being larger than all Europe ; which is proved by the Endeavour having coasted more than two thousand miles, even if her tract was reduced to a straight line.

line. To the northward the grass is not so rich, nor the trees so high as in the southern parts; and almost every where, even the largest trees grow at a distance of not less than thirteen yards asunder.

Besides the quadrupeds already mentioned, there is one, the belly of which is totally white, and the back brown, with white spots; it is much like a polecat, and the Indians call it quoll. There are vast numbers of beautiful pigeons, many of which were shot by the seamen; and the other land-birds are eagles, hawks, cranes, herons, bustards, crows, quails, doves, parrots, parroquets, cockatoos, and some other birds of very elegant plumage.

The insects are few in number, among which the musquito, and the ant are the chief. The ants are of four kinds. The first are perfectly green, and live on trees, in which they build curious nests, by bending down the leaves, and gluing them together with an animal juice; thousands of them joined to keep the leaf in its proper position, while many others were employed in the gluing them. Being disturbed in their work, the leaves, which are four or five inches in breadth, flew back with a force which was thought much superior to the united strength of these insects. Those who disturbed them paid for their curiosity, by being stung in a very severe manner.

The second kind of ants are quite black, and live in the inside of the branches of trees, after they have worked out the pith. Some of the branches being gathered, millions of these animals issued from every broken twig.

The third sort took up their lodging in the root of a plant that twines round the trunk of other trees. This root, which they hollowed for their purpose, was cut into great numbers of passages which ran across each other; yet the plant appeared not to have been injured. These were not more than half the size of the red ant of this country; but, upon being disturbed, they crawled over the body in thousands, and put their disturbers to the pain arising from exquisite tickling.

The fourth kind were like the white ants of the East Indies; and had one sort of nests as big as a half-peck-loaf, hanging from the boughs of the trees, and composed of several minute parts of vegetables, stuck together by a glutinous matter, supposed to have been supplied from their own bodies. The cells had a communication with each other, and had openings which led to other nests on the same tree; they had likewise a hollow covered passage to another nest on the ground, at the root of a different tree from that on which the former nest was suspended. The ground nests are six feet in height, and almost as much in breadth; the outside being plastered with clay of near two inches in thickness. These have a subterraneous passage to the roots of the trees near which they stand; whence the ants ascend, by covered ways, up the trunk and branches. As these ground-built houses are proof against the invasion of the rain, it is supposed that the ants retire to them during the wet season.

The seas abound with delicate green turtle, besides those enormous cockles which have been already mentioned. Alligators are found in the rivers and salt creeks.

The men are well made, of the middle size, and active in a high degree; but their voices are soft, even to effeminacy. Their colour is the chocolate; but they were so covered with dirt, as to look almost as black as negroes.

The chief ornament of these people is the bone that is thrust through the nose, which the sailors whimsically termed their spritsail-yard. Some few of them had an ornament of shells hanging across the breast. Besides these ornaments, they painted their bodies and limbs white and red, in stripes of different dimensions; and they had a circle of white round each eye, and spots of it on the face.

Their huts were built with small rods, the two ends of which were fixed into the ground, so as to form the figure of an oven; they are covered with pieces of bark and palm-leaves. The door of this building, which is only high enough to sit upright in, is opposite to the fire-place: they sleep with their heels turned up towards their heads, and even in this posture the hut will not hold more than four people.

They were frequently observed with the leaves of a tree in their mouths, but whether it had the qualities either of tobacco or betle could not be known; but it was observed not to discolour the teeth or lips.

They produce fire, and extend the flames in a very singular manner; they reduce one end of a stick into an obtuse point, they place this point upon a piece of dry wood, and turning the upright stick very fast backward and forward between their hands, the fire is soon produced: nor is it increased with less celerity:—One of the natives was frequently observed to run along the sea-coast, leaving fire in various places. These fires were supposed to be intended for the taking of the kangaroo, as that animal was so very shy of fire, that when forced by the dogs, it would not cross places which had been newly burnt, even when the fire was extinguished.

The points of their lances are sometimes made of fish-bones, and sometimes of a hard heavy wood; they are barbed with other pieces of wood or bone, so that when they have entered any depth into the body, they cannot be drawn out without tearing the flesh in a shocking manner, or leaving splinters behind them.

In the northern parts of this coast, the canoes are formed by hollowing out the trunk of a tree; and it was conjectured, that this operation must have been performed by fire, as the natives did not appear to have any instrument proper for the purpose. The canoes are in length about fourteen feet, and so narrow that they would be frequently overfet, but that they are provided with an outrigger. The natives row them with paddles, using both hands in that employment.

That the natives of this country sometimes wage war with each other is evident from their being possessed of weapons; yet not a single wound was seen on any of their bodies.

We shall now proceed to give an account of their passage from New South Wales to New Guinea, with a recital of the incidents which happened on their landing on the last mentioned country.

Early in the morning of the 24th of August 1770, the cable broke near the ring, in the attempt to weigh the anchor; on which another anchor was dropped, which prevented the ship driving. Determined, however, not to lose the anchor, they recovered it the next morning.

Soon after the anchor was weighed, the ship got under sail, steering north-west, and in a few hours one of the boats which was a-head made the signal for shoal-water. The ship instantly brought to, with all her sails standing. It was now found that she had met with another narrow escape, as she was almost encompassed with shoals; and was likewise so situated between them, that she must have struck before the boat's crew had made the signal, if she had been half the length of a cable on either side. In the afternoon she made sail with the ebb tide, and got out of danger before sun-set.

Next morning, the 28th, they pursued their voyage again, steering due north.

The ship now held this course, barely within sight of land, till the 3d of September; and as the water was but just deep enough to navigate the vessel, many unsuccessful attempts were made to bring her near enough to get on shore: it was therefore determined to land in one of the boats, while the ship kept plying off and on.

In consequence of this resolution, on the 3d of September, the captain, accompanied by Messrs. Banks and Solander, and attended by the boat's crew and Mr. Banks's servant, set out in the pinnace; but when they came within two hundred yards of the shore, the water was so shallow, that they were obliged to leave the boat to the care of two of the sailors, and wade to land. They were no sooner clear of the water, than they saw several prints of human feet on the sand, below high water mark, whence it was evident that the natives had been very lately there.

Our adventurers were now near a quarter of a mile from the pinnace, when three of the natives ran out of the woods, about one hundred yards beyond them, shouting in the most violent manner. They instantly ran towards our countrymen, the first of the three throwing something out of his hand, which flew on one side of him, burning in the same manner as gunpowder, but making no noise, while the other two threw their lances. The English now fired; when the natives stopped, and cast another lance, on which the musquets were loaded with ball and again fired. The poor Indians now ran off with expedition, having most probably been wounded in the unequal conflict. Captain Cook and his companions, unwilling farther to injure those who could not originally have intended them any harm, retreated hastily to the boat, which having reached, they rowed abreast of the natives, who by this time were assembled to the number of about eighty. Their stature was nearly the same with that of the inhabitants of New South Wales, but their colour not quite so dark. During the survey that was taken of them, they continued letting off their fires, a few at a time, in a kind of regular platoons; they were discharged by means of a piece of stick, almost like a hollow cane, which being swung sideways, produced fire and smoke exactly like that occasioned by the firing of small arms. The crew on board the ship saw this strange phenomenon, and thought the natives had fire-arms. The gentlemen having satisfied their curiosity, by attentively looking at these people, fired some musquets above their heads, the balls from which being heard to rattle among the trees, the natives deliberately retired. The lances which had been thrown soon after the gentlemen landed, were made of a reed, or bamboo cane, and the points were made of hard wood, barbed in several places; it is imagined, that these lances were discharged by means of a throwing-stick, as they flew with great swiftness above sixty yards.

The whole coast of this country is low land, but clothed with a richness of trees and herbage which exceeds all description. The cocoa-nut trees were also very numerous.

On the evening of the 9th, they saw what had the appearance of land. The ship stood off and on during the night, when a number of fires were seen upon the island, and the next morning smoke was seen in several places, whence it was conjectured that the place was well peopled.

On the 16th, they had sight of the little island called Rotte; and the same day saw the island Semau.

At ten o'clock this night a dull reddish light was seen in the air. This phenomenon, which reached about ten degrees above the horizon, bore a considerable resemblance to the Aurora Borealis, only that the rays of light which it emitted had no tremulous motion. It was surveyed for two hours, during which time its brightness continued undiminished.

As the ship was now clear of all the islands which had been laid down in such maps as were on board, they made sail during the night, and were surprised the next morning at the sight of an island to the west-south-west, which they flattered themselves was  
a new

a new discovery. Before noon they had sight of houses, groves of cocoa-nut trees, and large flocks of sheep. This was a welcome sight to people whose health was declining for want of refreshments. The second lieutenant was immediately dispatched in the pinnace, in search of a landing-place; and he took with him such things as it was thought might be acceptable to the natives: Dr. Solander went with him.

Two horsemen were seen from the ship, one of whom had a laced hat on, and was dressed in a coat and waistcoat of the fashion of Europe. These men rode about on shore, taking little notice of the boat, but regarding the ship with the utmost attention. As soon as the boat reached the shore, some other persons on horseback, and many on foot, hastened to the spot, and it was observed that some cocoa-nuts were put into the boat, from whence it was concluded that a traffick had commenced with the natives. A signal being made from the boat that the ship might anchor in a bay, at some distance, she immediately bore away for it.

When the lieutenant came on board, he reported that he could not purchase any cocoa-nuts, as the owner of them was absent, and that what he had brought were given him; in return for which he had presented the natives with some linen. The method by which he learnt that there was a harbour in the neighbourhood, was by the natives drawing a kind of rude map on the sand, in which the harbour, and a town near it were represented; it was likewise hinted to him that fruit, fowls, hogs, and sheep, might be there obtained in great abundance. He saw several of the principal inhabitants of the island, who wore chains of gold about their necks, and were dressed in fine linen. When the boat's crew were on the point of returning to the ship, the gentleman who had been seen on horseback in the dress of Europe came down to the beach; but the lieutenant did not think it proper to hold a conference with him, because he had left his commission on board the ship.

In the evening, when the ship had entered the bay to which they had been recommended, an Indian town was seen at a small distance, upon which a jack was hoisted on the fore-top-mast-head. Presently afterwards three guns were fired, and Dutch colours were hoisted in the town. The ship, however, held on her way, and came to an anchor at seven in the evening.

The colours being seen hoisted on the beach the next morning, the captain concluded that the Dutch had a settlement on the island; he therefore dispatched the second lieutenant to mention what necessities they were in want of.

He was conducted to the Raja, or King of the island, to whom, by means of a Portuguese interpreter, he made known his business. The Raja said, he was ready to supply the ship with the necessary refreshments; but that he could not trade with any other people but the Dutch, with whom he was in alliance, without having first obtained their consent; but that he would make application to the Dutch agent, who was the only white man among them. This agent, whose name was Lange, behaved politely to the lieutenant, and told him he might buy what he thought proper of the inhabitants of the island.

Immediately after, the Raja and Mr. Lange intimated their wishes to go on board the ship, and that two of the boat's crew might be left as hostages for their safe return; the lieutenant gratified both these requests, and took them on board just before dinner was served. It was thought that they would have sat down without ceremony; but, on some hesitation, the Raja intimated his doubts, whether, being a black, they ~~be~~ <sup>permitted</sup> him to sit down with them. The politeness of the officers soon removed ~~useful~~ <sup>useful</sup> ~~ness~~ <sup>ness</sup>, and the greatest good humour and festivity prevailed among them. As ~~determined~~ <sup>determined</sup>, and another gentleman on board, were tolerable proficient in Dutch, they



they acted as interpreters between Mr. Lange and the officers, while some of the sailors, who understood Portuguese, conversed with such of the Raja's attendants as spoke that language. The chief part of the dinner was mutton, which the Raja having tasted, he begged an English sheep, and the only one which they had left was given him. He then asked for a dog, and Mr. Banks gave him his greyhound; and a spying-glass was presented to him, on Mr. Lange's intimating that it would be acceptable.

The visitors now told Captain Cook, that there was great plenty of fowls, hogs, sheep and buffaloes on the island, numbers of which should be conveyed to the sea shore on the following day, that he might purchase what was necessary for the recovery of the sick, and for sea-stores. This welcome news gave great spirits to the company, and the bottle went so briskly round, that Mr. Lange and his companions became almost intoxicated. They had, however, the resolution to express a desire to depart, before they were quite drunk. Messrs. Solander and Banks went ashore with the visitors, who were saluted at their departure with nine guns, which they returned with three cheers.

On the following day the captain, attended by several gentlemen, went on shore to return the Raja's visit; but their principal intention was, to buy the refreshments which had been mentioned the preceding day. When they landed, they were chagrined to find that the cattle had not been driven down to the beach. They went on to the town.

The Raja was at the house of assembly, surrounded by many of his principal subjects; and Mr. Lange also attended. Captain Cook having informed them that he had loaded his boat with goods, which he wished to exchange for necessary refreshments, permission was given to land his effects. The Captain now endeavoured to make an agreement for the hogs, sheep, and buffaloes, which were to be paid for in cash; but this business was no sooner hinted at than Mr. Lange took his leave, having first told the captain that he must make his agreement with the natives; and adding, that he had received a letter from the Governor of Concordia, in Timor, the contents of which should be disclosed at his return.

They were invited to dine with the Raja, but he did not partake of the entertainment, as it was not customary here to sit down with their guests. They began their dinner, which consisted of pork and rice, very excellent of their kinds, served up in thirty-six dishes, and three earthen bowls, filled with a kind of broth, in which the pork had been boiled. The spoons were formed of leaves, but were so small, that the hunger of the guests would scarcely allow them patience to use them.

When dinner was ended, the captain invited the Raja to drink wine with him; but this he declined, saying, that the man who entertained company should never get drunk with his guests.

When the bottle had circulated some time, Captain Cook began to enquire after the cattle that were promised to be driven down to the beach; when Mr. Lange informed him, that in the letter which he had received from the Governor of Concordia, instructions were given, that if the ship should touch at the island, and be in want of provisions, she should be supplied; but that he was not to permit her to remain longer than was absolutely necessary. That no presents were to be made to the natives of low rank, nor even left with their superiors to be divided among them after the ship had sailed; but, he added, that any trifling civilities received from the Indians, might be acknowledged by a present of beads, or any other articles of small value. It is a very probable conjecture, that the whole of this story was of Mr. Lange's own manufacture,



facture, and solely calculated to draw all the presents of any value into his own pocket.

Soon after this the captain was informed, that some sheep had been driven down to the beach ; but had been conveyed away before the men could get money from the ship to pay for them, and that not a single hog or buffalo had been driven down ; but that a small number of fowls, and a quantity of the palm-syrup had been bought.

Heartily vexed to be thus disappointed of the chief articles which were wanted, the captain remonstrated with Mr. Lange, who told him, that if he and his officers had gone to the spot, they might have purchased any thing they pleased ; but that the Indians imagined the seamen would impose on them with counterfeit money.

This story was no more credited than the former ; but not to lose more time in a case of such urgency, the captain instantly repaired to the beach ; but there were no cattle to be bought. During his absence, Lange informed Mr. Banks that the Indians were offended, that the seamen had not offered gold for what they had to sell, and that no other metal would purchase their commodities ; but Mr. Banks, disdainng to hold farther conversation with a man who had been guilty of such repeated subterfuges, left him abruptly.

On the 20th the captain and Dr. Solander went again on shore, and while the latter proceeded to the town in search of Lange, the captain staid on the beach, with a view to buy cattle. At this place was an old man, who had been distinguished by the name of prime minister, because he appeared to be invested with considerable authority ; and the captain now presented him with a spying-glass, in order to make a friend of him. At present there was nothing brought for sale but a small buffalo, for which five guineas were demanded. Though the captain knew that this was double its value, yet he bid three guineas, as he was willing to begin dealing at any rate. The person who had it to sell said, he could not take the money till the Raja had been informed what was offered ; on which a man was sent to him, who soon came back with a message, that five guineas would be the lowest price : this the captain refused to give ; on which a second messenger was dispatched, who staying a long time, Captain Cook was anxiously expecting his return, when he saw Dr. Solander coming towards the beach, escorted by more than a hundred persons, some of whom had lances in their hands, and the rest were armed with muskets. When the doctor arrived at the marketing place, he informed the captain, that Lange had interpreted to him a message from the Raja, the substance of which was, that the natives were averse to all traffick with the English, because they would not give above half the real worth of the things which were offered for sale ; and that all trading whatever should be prohibited after that day.

A native of Timor, whose parents were Portuguese, came down with this party, and delivered to the captain what was pretended to be the order of the Raja, and which was in substance the same as Lange had told Dr. Solander ; but it was afterwards discovered, that this man was a confederate of Lange's, in the scheme of extortion. The English gentlemen had at the same time no doubt but that the supposed order of the Raja was a contrivance of these men ; and while they were debating how they should act in this critical conjuncture, anxious to bring the affair to a speedy issue, the Portuguese began to drive away such of the natives as had brought palm-syrup and fowls to sell, and others who were now bringing sheep and buffaloes to the market.

Just at this juncture Captain Cook happening to look at the old man who had been distinguished by the name of prime-minister, imagined that he saw in his features a disapprobation of the present proceedings ; and willing to improve the advantage, he grasped

grasped the Indian's hand, and gave him an old broad sword. This well-timed present produced all the good effects that could be wished; the prime minister was enraptured at so honourable a mark of distinction, and, brandishing his sword over the head of the impertinent Portuguese, he made both him, and a man who commanded the party, sit down behind him on the ground. The whole business was now accomplished; the natives, eager to supply whatever was wanted, brought their cattle in for sale, and the market was soon stocked. For the first two buffaloes Captain Cook gave ten guineas; but he afterwards purchased them by way of exchange, giving a musquet for each; and at this rate he might have bought any number he thought proper. There seems to be no doubt but that Lange had a profit out of the first two that were sold, and that his reason for having said that the natives would take nothing but gold for their cattle, was, that he might the more easily share in the produce. Captain Cook purchased of the natives of this island some hundred gallons of palm-syrup, a small quantity of garlic, a large number of eggs, some limes, and cocoa-nuts, thirty dozen of fowls, three hogs, six sheep, and nine buffaloes.

Having at length obtained these necessary refreshments, Captain Cook prepared for sailing from this place.

This island is called Savu; it is situated in  $10^{\circ} 35'$  south latitude, and  $237^{\circ} 30'$  west longitude, and has hitherto been very little known, or very imperfectly described. Its length is between twenty and thirty miles; but its breadth could not be ascertained. At the time the Endeavour lay there it was near the end of the dry season, when it had not rained for almost seven months, nor was there a running stream of fresh water to be seen, and the natives were supplied only by small springs, situated at a distance up the country. The rains in this country cease in March or April, and fall again in October or November: and these rains produce abundance of indigo, millet, and maize, which grow beneath the noblest trees in the universe.

Besides these articles, the island produces tobacco, cotton, betel, tamarinds, limes, oranges, mangoes, rice, Guinea-corn, callevances, and water-melons. A trifling quantity of cinnamon was seen, and some European herbs, such as garlic, fennel, celery and marjoram; besides which, there are fruits of various kinds, and particularly the *blimbi*, which has a sharp taste, and is said to be a fine pickle, but it is not eaten raw.

Several buffaloes were seen on this island, which were almost as large as an ox: and from a pair of enormous horns of this animal which Mr. Brins saw, it was conjectured, that some of them were much larger; yet they did not weigh more than half as much as an ox of the same apparent size, having lost the greater part of their flesh through the late dry weather; the meat, however, was juicy, and of a delicate flavour. The horns of these animals bend backwards, they have no dewlap, nor scarce any hair on their skins, and their ears are remarkably large. The other tame animals on the island are dogs, cats, pigeons, fowls, hogs, goats, sheep, asses and horses.

Few of the horses are above twelve hands high, yet they are full of mettle, and pace naturally in an expeditious manner; the natives ride them with a halter only. The sheep are not unlike a goat, and are therefore called cabritos. The sea-coast furnishes the inhabitants with turtle, but not in any great abundance.

The natives of the island of Savu are rather below the middle nature; their hair is black and straight, and persons of all ranks, as well those that are exposed to the weather, as those that are not, have one general complexion, which is dark brown. The men are well formed and sprightly, and their features differ much from each other: the women, on the contrary, have all one set of features, and are very short and broad built.

The men have iron pincers hanging by strings round their necks, with which they pluck out the hair of their beards; and both men and women root out the hair that grows under the arms.

The dress of the men consists of two pieces of cotton cloth, one of which is bound round the middle, and the lower edge of it being drawn pretty tight between the legs, the upper edge is left loose, so as to form a kind of a pocket, in which they carry their knives and other things: the other piece being passed under the former, on the back of the wearer, the ends of it are carried over the shoulders, and tucked into the pocket before. The women draw the upper edge of the piece round the waist tight, while the lower edge, dropping to the knees makes a kind of a petticoat: the other piece of cloth is fastened across the breast, and under the arms. This cloth, which is manufactured by the natives, is dyed blue while in the yarn; and, as it is of various shades, its look when it comes to be worn is very beautiful.

The ornaments of the natives of Savu are very numerous, and consist of rings, beads worn round the neck and on the wrists, and chains of plaited gold wire, likewise worn round the neck: these things were worn by both sexes; but the women had also circles of beads round their waist, which helped to keep up the petticoat.

The houses on the island of Savu are of different lengths, from twenty feet to four hundred, according to the rank of the inhabitant, and are fixed on posts about four or five feet from the ground. The houses are generally divided into three rooms of equal size, the middle room being set apart for the use of the women; and sometimes smaller rooms are added from the sides of the building, the whole of which is thatched with the leaves of the palm-tree.

The natives eat all the tame animals which the island produces, but they prefer the hog to all the rest. Next to the hog's flesh they admire that of the horse, to which succeeds the beef, then the poultry; and they like the flesh of cats and dogs much better than that of goats and sheep. They seldom eat fish.

The fan-palm is the most remarkable, and most useful tree that grows on the island, its uses being of a great and various kind. Soon after the buds put forth, the natives cut them, and tying up them little baskets, formed of the leaves of the tree, a liquor drops into them, which has the taste of a light wine, and is the common liquor of all the inhabitants. The leaves of the tree are applied to the various uses of making tobacco-pipes, and pipes, cups, baskets, and the thatching of houses. The fruit is nearly the size of a common turnip; but the natives are not fond of it.

The island consists of four divisions, each of which has a raja, or chief governor of its own. These are called Timo, Massara, Regeewa, Laai and Seba. It was on this last division that the English adventurers went on shore; the raja of which was between thirty and forty years of age, and remarkable for his corpulency. He governs his people with the most absolute authority, but takes on him very little of the parade or pomp of a monarch.

The natives are very expert in the use of their lances, that they will throw them with such force and exactness, as to pierce a man through the heart at the distance of sixty or seventy yards.

The inhabitants of Savu are divided into five ranks; the rajas, the land-owners, manufacturers, laborers, and slaves. The land-owners are respected in proportion to the extent of their lands, and the number of their slaves, which last are bought and sold with the estate to which they belong; but when a slave is bought separately, a fat hog is the price of the purchase. Though a man may sell his slave in this manner,

or convey him with his lands, yet his power over him extends no farther, for he must not even strike him without the raja's permission.

The natives in general are robust and healthy, and had the appearance of being long-lived. The small-pox has found its way to this island, and is as much dreaded as the pestilence. When this disorder attacks any person, he is carried to some spot at a great distance from any house, where his food is conveyed to him by means of a long stick, for no one will venture very near the invalid, who is thus left to take his chance of life or death.

The island of Savu having been visited by the Portuguese almost at their first sailing into this part of the world, they established a settlement upon it; but in a little time they were succeeded by the Dutch, who, though they did not formally possess themselves of the island, sent a number of trading vessels to establish a treaty of commerce with the natives. The principal object of this treaty is, that the rajas should furnish the Dutch, for the consumption of their spice islands, with rice, maize, &c. annually, and they are to return the value in arrack, cutlery wares, linen, and silk. In this agreement the rajas stipulated, that a Dutch resident should be constantly on the island, to observe that their part of the contract was fulfilled.

As soon as this was accomplished, they sent Mr. Lange to act as their resident. Once every two months, he is attended by fifty slaves on horseback, and in this state visits each of the rajas. He constantly takes with him a quantity of arrack, by the help of which he does not fail of making advantageous bargains with the rajas.

Lange had been on this island ten years, during all which time he had not seen a white person, except those who came annually in the Dutch ship to carry off the rice. He is married to an Indian woman, a native of the island of Timor, and he lives in the same manner as the inhabitants of Savu, whose language he speaks better than any other; like them too he sits on the ground and chews betle, and has so perfectly adopted their manners, that he is an absolute Indian, except in dress and complexion.

The morality of these people is of the purest kind. A robbery is scarce ever committed, and a murder is never perpetrated. When any disputes arise between the natives, they instantly submit the point in debate to the decision of the raja, and rest perfectly satisfied with his determination. No man is permitted to marry more than one wife; yet a violation of the marriage bed, or even the crime of simple fornication, is almost wholly unknown among them.

Of the islands in the neighbourhood of Savu, the principal is Timor, which is annually visited by the Dutch residents on the other islands, in order to make up their accounts.

A French ship was wrecked on the coast of Timor, about two years before the *Endeavour* was in these seas. She had been lodged on the rock several days, when the wind tore her to pieces in an instant, and the captain, with the greater number of the seamen, were drowned; but a lieutenant, and about eighty men reached the shore, where their immediate necessities were relieved, after which they returned to the wreck, in company with some Dutch and Indians, who assisted them in recovering all their chests of bullion, some of their guns and other effects, which being done, they returned, where they remained several weeks; but in this interval, death made such havock among them, that not above half their number remained to be sent to their native country.

The *Endeavour* sailed from the island of Savu on the 21st of September, 1770, and bent her course westward.

When after the captain's return from his enterprize in the Endeavour, (an account of which has been read) it was determined to send a ship to complete the discovery in the southern hemisphere; and for this purpose a vessel of a particular construction were purchased of Captain Hammond, of London. It was 162 tons, she was named the Resolution; the other was 336 tons, and named the Adventure. Captain James Cook was appointed to the command of the Resolution, and Captain Tobias Furneaux was promoted from the rank of a lieutenant to the command of the latter.

The Resolution had 112 persons on board, officers included, and the Adventure 81. Mr. Forster and his son, and Mr. Wales, now mathematical master of Christ's Hospital, accompanied them.

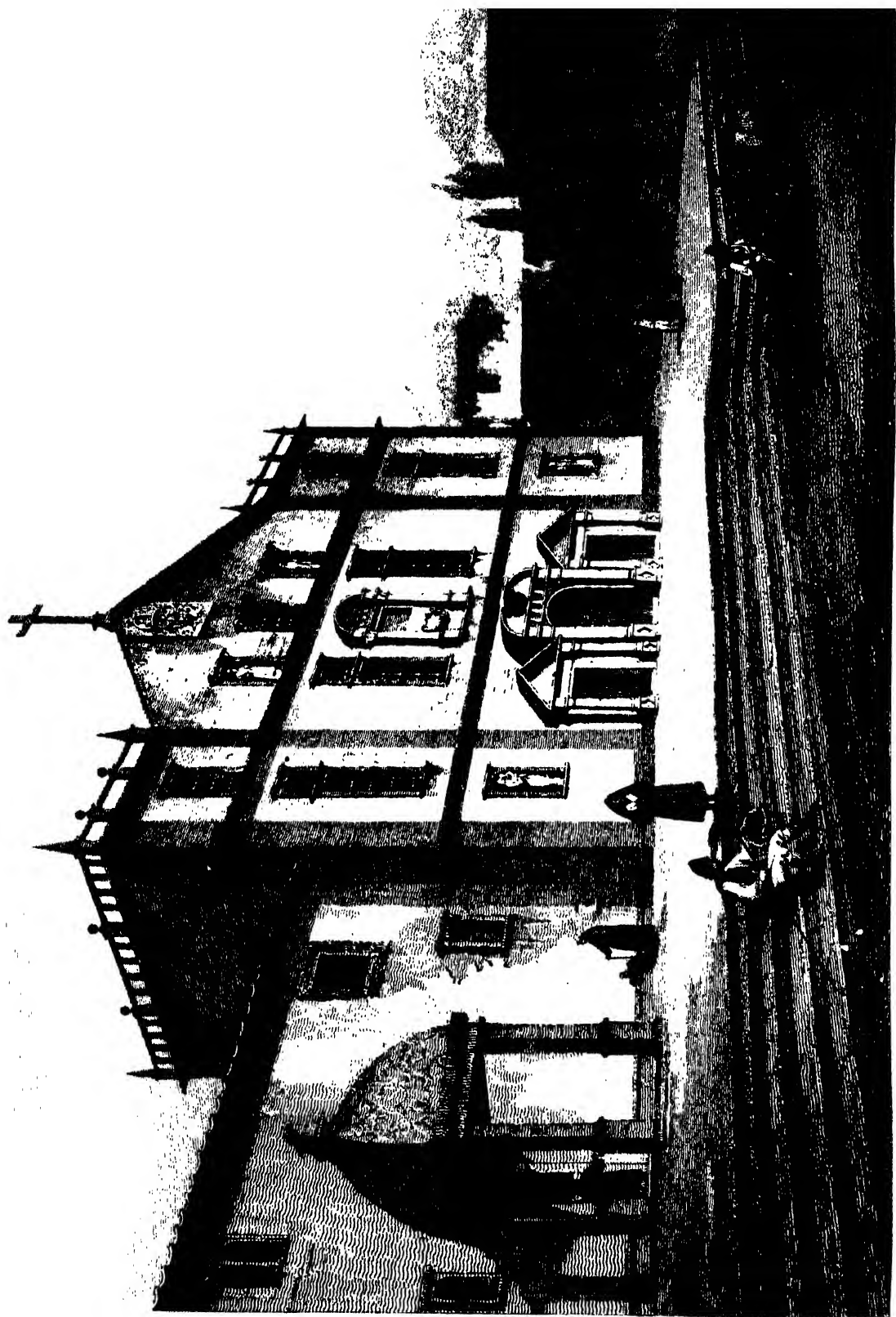
On the 13th of June, 1772, at six o'clock in the morning, both the ships sailed from Plymouth Sound, and on the evening of the 29th anchored in Funchiale Road, in the island of Madeira. At the captain's and Mr. Forster's landing, they were received by a gentleman from the vice-consul, Mr. Sills, who conducted them to the house of Mr. Loughmans, the most considerable English merchant in the place. This gentleman not only obtained leave for Mr. Forster to search the island for plants, but procured them every other thing they wanted, and insisted on their accommodating themselves at his house during their stay.

When they got on board a supply of water, wine, and other necessaries, they left Madeira on the 1st of August, and steered southward.

Captain Cook now made three puncheons of beer, of the inspissated juice of malt. The proportion was about ten of water to one of juice. They stopped at St. Jago for a supply of water, on the 10th; the captain immediately dispatched an officer to ask leave to water, and purchase refreshments, which was granted. The 14th in the evening, having completed their water and got on board a supply of refreshments, such as hogs, goats, fowls, and fruit, they put to sea, and proceeded on their voyage.

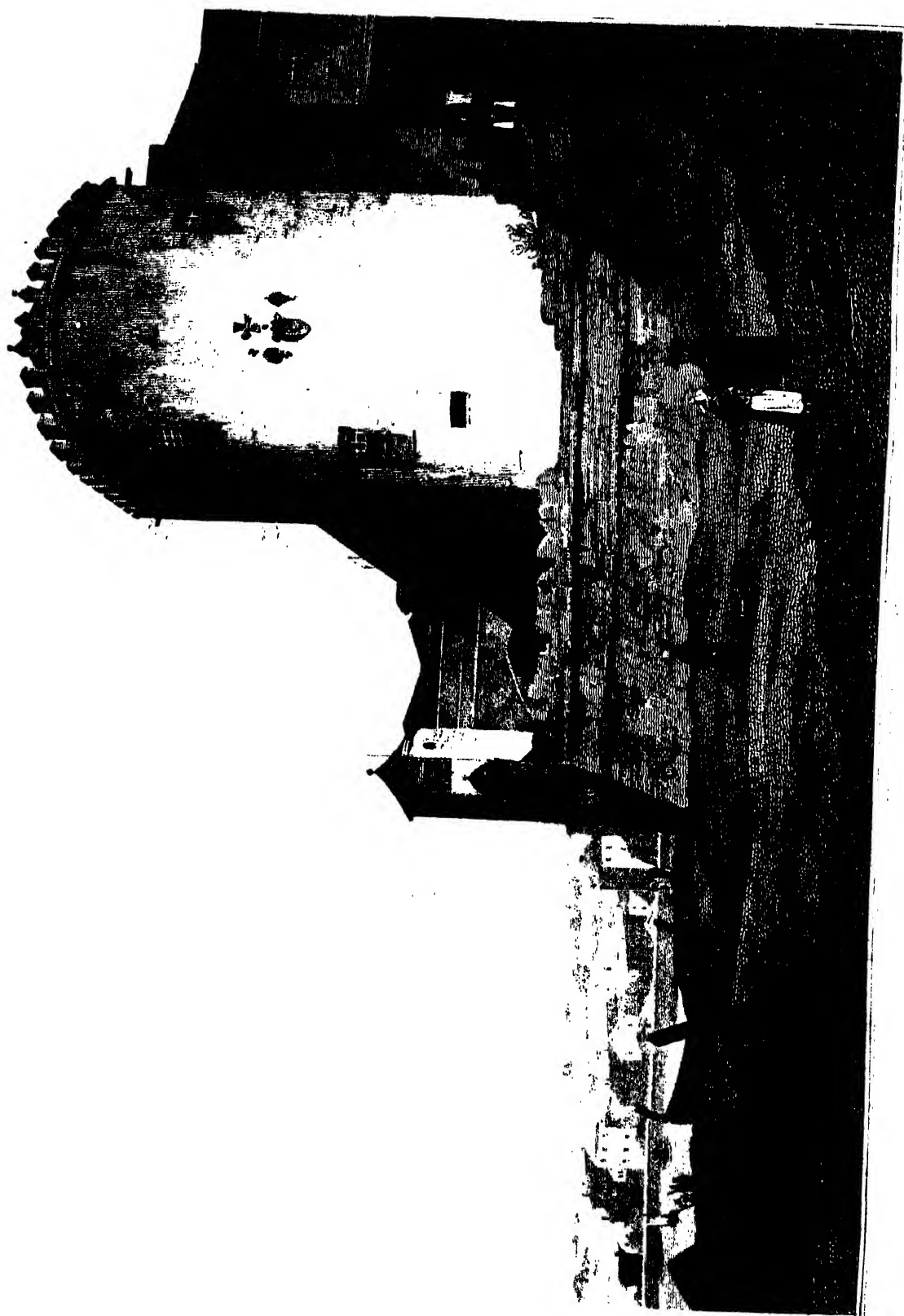
Where they anchored, is a small bay, situated about the middle of the southern side of the island of St. Jago. The water is tolerable, but scarce; and bad getting on, on account of a great surf on the beach. The refreshments to be got here are hogs, goats, sheep, poultry, and fruits. The goats are of the antelope kind, and are remarkably lean, that hardly any thing can equal them; and the bullocks, hogs, &c. are not much better. Bullocks must be purchased with money; the price is about Spanish dollars a head, which is between 100 and 300 pounds: Oxen may be got from the natives in exchange for old clothes, &c.

On the afternoon of the 15th, the carpenter's mates fell overboard, and was drawn up over the side, fast on one of the scuttles; where, it was supposed, he was fastened, as was seen that the very instant he sunk under the ship's stern, where several voices to save him were heard. This loss was sorely felt during the voyage, as he was a sober man and a good workman.











On the 27th, Captain Furneaux lost one of his petty officers.

With variable winds they advanced but slowly, and without meeting with any thing remarkable till the 23d, when they saw a seal, or, as some thought, a sea-lion, which probably might be an inhabitant of one of the islands of Tristram de Cunha, being now nearly in their latitude.

At two in the afternoon on the 29th, they made the land of the Cape of Good Hope. The Table Mountain which is over the Cape Town, distance 12 or 14 leagues, was a good deal obscured by clouds, otherwise it might, from its height, have been seen at a much greater distance. Between eight and nine o'clock this evening, the whole sea, within the compass of their sight became at once, as it were, illuminated, or, what the seamen call, all on fire. This appearance of the sea, in some degree, is very common; but the cause is not so generally known. Mr. Banks and Dr. Solander were of opinion it was occasioned by sea insects; Mr. Foster, however, seemed not to favour this opinion. Some buckets of water, were drawn up from along-side the ship, which was found full of an innumerable quantity of small globular insects, about the size of a common pin's head, and quite transparent.

In the morning they stood into Table Bay, and anchored in five fathom water. They had no sooner anchored than they were visited by the captain of the port and Mr. Brandt. This last gentleman brought off such things as could not fail of being acceptable to persons coming from sea. The master attendant also visited them, according to custom, to take an account of the ships; to enquire into the health of the crews; and, in particular, if the small-pox was on board; a thing they dread above all others at the Cape, and for these purposes a surgeon is always one of the visitants.

Captain Cook waited upon the governor, accompanied by Captain Furneaux and the two Mr. Forsters. He received them with great politeness, and promised every assistance the place could afford.

After having visited the governor and some other principal persons of the place, they fixed at Mr. Brandt's, the usual residence of most officers belonging to English ships. This gentleman spares neither trouble nor expence to make his house agreeable to those who favour him with their company, and to accommodate them with every thing they want.

Three or four days after them, two Dutch Indiamen arrived here from Holland, after a passage of between four and five months, in which one lost, by the scurvy and other putrid diseases, 150 men, and the other 41. They sent, on their arrival, great numbers to the hospital in very dreadful circumstances.

It was the 18th of November before they had got ready to put to sea. During this stay the crews of both ships were served every day with fresh beef or mutton, new baked bread, and as much greens as they could eat. The ships were caulked and painted; and, in every respect, put in as good a condition as when they left England.

Mr. Forster, whose whole time was taken up in the pursuit of natural history and botany, met with a Swedish gentleman, one Mr. Sparrman, who had travelled under Dr. Linnæus. He, by Captain Cook's consent, embarked as an assistant to Mr. Forster, who bore his expences on board, and allowed him a yearly stipend besides.

At three o'clock in the afternoon of the 22d they weighed, with the wind at north by west. On the 25th they had abundance of albatrosses about them, several of which were caught with hook and line; and were very well relished by many of the people, notwithstanding they were at this time served with fresh mutton. Judging that they should

should soon come into cold weather, the captain ordered fops to be served to such as were in want; and gave to each man the fear-nought jacket and trowsers allowed them by the Admiralty.

A violent gale, which was attended with rain and hail, blew at times with such violence, that they could carry no sails; by which means they were driven far to the eastward of their intended course, and no hopes were left of reaching Cape Circumcision. But the greatest misfortune that attended them, was the loss of great part of their live stock, which they brought from the Cape, and which consisted of sheep, hogs, and geese. There was now a sudden transition from warm, mild weather, to extreme cold and wet, which made every man in the ship feel its effects; for, by this time, the mercury in the thermometer had fallen to 38, whereas at the Cape it was generally at 67 and upward. The night proved clear and serene, and the only one that was so since they left the Cape; and the next morning the rising sun gave such flattering hopes of a fine day, that they were induced to let all the reefs out of the top-sails. Their hopes, however, soon vanished; for by one o'clock P. M. the wind, which was at south-east blew with such strength as obliged them to take in all their sails, to strike top-gallant-masts, and to get the spritsail-yard in. The three following days the wind abated.

On the 10th, the weather being hazy, they did not see an island of ice, which they were steering directly for, till they were less than a mile from it. It appeared to be about 50 feet high, and half a mile in circuit. It was flat at the top, and its sides rose in a perpendicular direction, against which the sea broke exceedingly high. Captain Furneaux at first took this ice for land, and hauled off from it, until called back by signal. As the weather was foggy, it was necessary to proceed with caution.

The hazy weather continued on the 11th and 12th, with sleet and snow; so that they were obliged to proceed with great caution on account of the ice islands. Six of these they passed this day; some of them near two miles in circuit and sixty feet high. And yet, such was the force and height of the waves, that the sea broke quite over them. Captain Cook says, "This exhibited a view which for a few moments was pleasing to the eye; but when we reflected on the danger, the mind was filled with horror. For were a ship to get against the weather side of one of these islands when the sea runs high, she would be dashed to pieces in a moment."

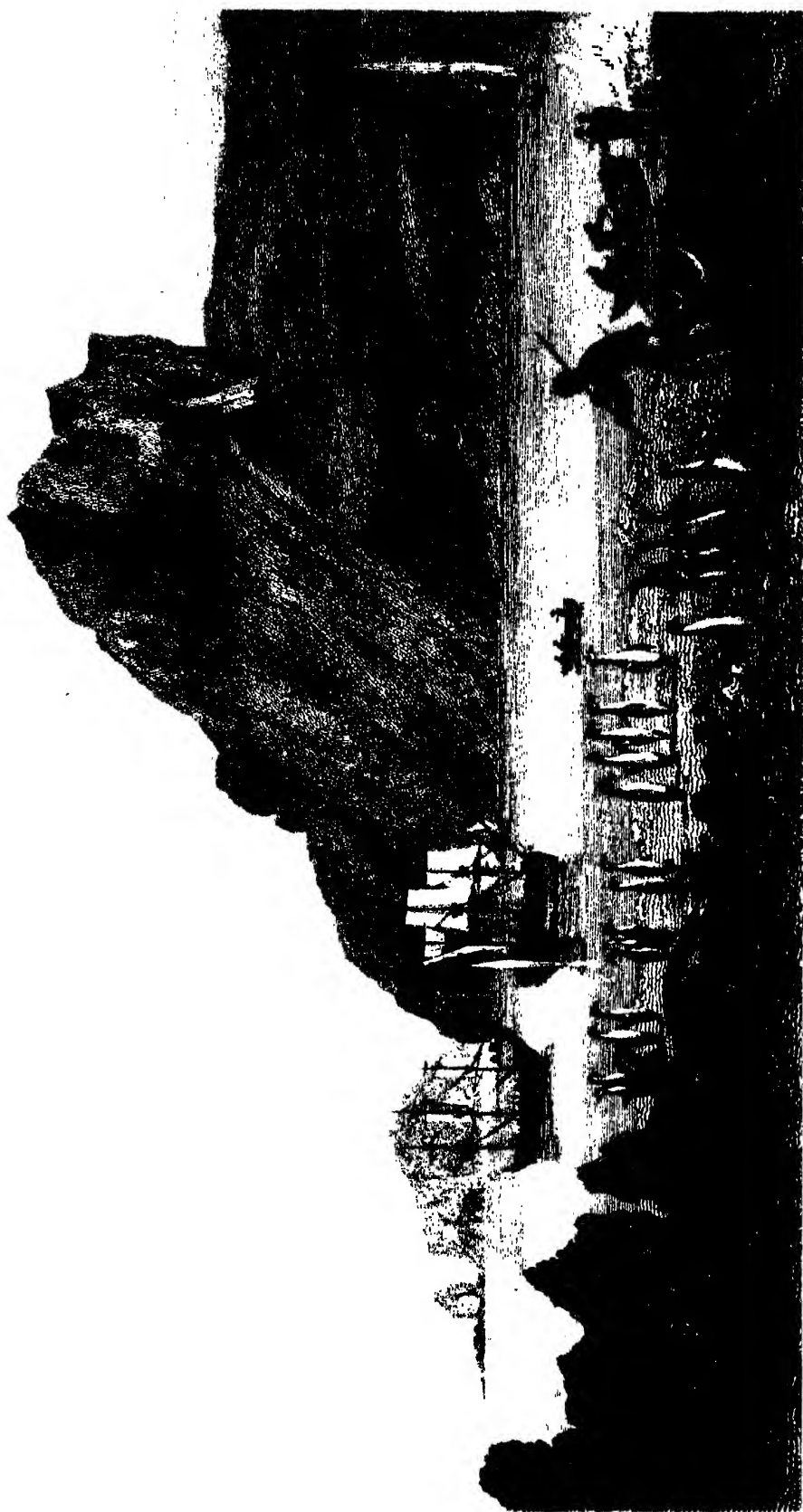
From noon till eight o'clock in the evening, twenty ice islands, of various extent, both for height and circuit, came in view. At about nine o'clock they found no ground with one hundred and fifty fathom of line.

At eight o'clock on the 14th, they brought to under a point of the ice, where they had smooth water: and the two captains fixed on rendezvouses in case of separation, and some other matters, for the better keeping company.

Next day, the 15th, they had the wind at north-west a small gale, thick foggy weather, with much snow; their sails and rigging were all hung with icicles. The fog was so thick, at times, that they could not see the length of the ship; and they had much difficulty to avoid the many islands of ice, that surrounded them.

On the 17th, they saw many whales, one seal, penguins, some white birds, another sort of peterel, which is brown and white, and not much unlike a pintado; and some other sorts. They found the skirts of the loose ice to be more broken than usual; and it extended some distance beyond the main field, insomuch that they sailed amongst it the most part of the day; and the high ice islands without were innumerable. The weather was sensibly colder than the thermometer seemed to point out, insomuch that the whole crew complained. In order to enable them to support this the better, the sleeves of their jackets, (which were so short as to expose their arms were





were lengthened with baize; and had a cap made for each man of the same stuff, together with canvas; which proved of great service to them.

On the 21<sup>st</sup> being near a mountain, which was about fifty feet high and four hundred paces in circuit, the men went in the jolly-boat to see if any water ran from it. They returned without success, that there was not one drop, or any other appearance of it. They sailed that day through several floes, or fields of loose ice, lying in the bay of land, and sailed west.

On the 22<sup>nd</sup> they came to a resolution to run as far west as the meridian of Cape Circumference, and they met with no impediment, as the distance was not more than eight miles; the wind favourable, and the sea seemed to be pretty clear of ice. At one o'clock they steered for an island of ice, thinking, if there were any loose ice round it, to get some on board, and convert it into fresh water. At four they brought to, close to the edge of the island, where they did not find what they wanted, but saw upon it eighty or a hundred penguins. This piece of ice was about half a mile in circuit, and one hundred feet high and upwards; for they lay for some minutes with every sail becalmed under it. The side on which the penguins were, rose sloping from the sea, so as to admit them to creep up it.

They continued to the westward, with a gentle gale at east-north-east; the weather being sometimes tolerably clear, and at other times thick and hazy, with snow. On the 30<sup>th</sup> they shot one of the white birds; upon which they lowered a boat into the water to take it up; and by that means killed a penguin which weighed eleven pounds and a half. The white bird was of the petrel tribe; the bill, which is rather short, is of a colour between black and dark-blue; and their legs and feet are blue.

On the 1<sup>st</sup> of January, 1773, the weather was so clear that they might have seen land at fourteen or fifteen leagues distance.

On the 2<sup>nd</sup>, they had much snow and sleet, which, as usual, froze on the rigging as it fell; so that every rope was covered with the finest transparent ice. This afforded an agreeable sight enough to the eye, but conveyed to the mind an idea of coldness, much greater than it really was; for the weather was rather milder than it had been for some time past, and the sea less incumbered with ice.

On the 3<sup>rd</sup> they brought to, and hoisted out three boats; and in about five or six hours, took up as much ice as yielded fifteen tons of good fresh water. The pieces taken were so hard, and solid as a rock; some of them so large, that they were obliged to break them with pick-axes, before they could be taken into the boats.

The ice, which adhered to the ice was so trifling as not to be tasted, and after it had been on the deck a short time, entirely drained off; and the water which the ice yielded was so sweet and well tasted. Captain Cook says, "This is the most expedient method of watering he ever met with."

On the 4<sup>th</sup> they saw no less than thirty-eight ice-islands, one was sixteen or eighteen feet high, and of great extent. Here also they saw many whales playing about the ice. The day before, had seen several flocks of the brown and white pintado, and named antarctic petrels, because they seem to be natives of that region.

On the 5<sup>th</sup> of January, at half past four o'clock in the afternoon, Captain Furneaux informed Cook that he had just seen a large float of sea or rock-weed, and about a dozen divers. These were, certainly, signs of the vicinity of land; but whether east or west, was not possible for them to know.

On the 6<sup>th</sup> of January, having lost sight of the Adventure, they suspected a separation had taken place, though they were at a loss to tell how it had been effected.



Captain Furneaux had been ordered by Captain Cook, in case he was separated, to cruize three days in the place where he last saw him; he therefore continued making short boards, and firing half-hour guns, till the 9th in the afternoon, when the weather having cleared up, they could see several leagues round them, and found that the Adventure was not within the limits of their horizon. At this time they were about two or three leagues to the eastward of the situation they were in when they last saw her. Next day they saw nothing of her, notwithstanding the weather was pretty clear, and Captain Cook had kept firing guns, and burning false fires all night. He therefore gave over looking for her, made sail, and steered south-east, with a fresh gale at west-by-north, accompanied with a high sea from the same direction.

On the 17th, at nine in the morning, they bore down to an island of ice, which they reached by noon. It was full half a mile in circuit, and two hundred feet high at least; though very little loose ice about it. But while they were considering whether or no they should hoist out boats to take some up, a great quantity broke from the island. Of this detached part, they made a shift to get on board about nine or ten tons before eight o'clock, when they hoisted in the boats and made sail to the east, inclining to the south, with a fresh gale at south: which, soon after, veered to south-south-west and south-west, with fair but cloudy weather.

On the 23d, they tacked, and spent the night, which was exceedingly stormy, thick, and hazy, with fleet and snow, in making short boards. Surrounded on every side with danger, they wished for day-light. This, when it came, served only to increase their apprehensions, by exhibiting to view those huge mountains of ice, which, in the night, they had passed without seeing.

These dangers were, however, now become so familiar, that the apprehensions they caused were never of long duration; and were, in some measure, compensated both by the seasonable supplies of fresh water these ice islands afforded, (without which they must have been greatly distressed,) and also by their very romantic appearance, greatly heightened by the foaming of the waves into the curious holes and caverns which are formed in many of them; the whole exhibiting a view, which at once filled the mind with admiration and horror, and can only be described by the hand of an able painter.

The 28th, a sow having in the morning farrowed nine pigs, every one of them was killed by the cold before four o'clock in the afternoon, notwithstanding great care was taken of them: chilbains were also common. Such is the summer weather they enjoyed!

On Sunday, the 7th of March, the weather became fair, the sky cleared up, and the night was remarkably pleasant, as well as the morning of the next day; which for the brightness of the sky, and serenity and mildness of the weather, gave place to none they had seen since they had left the Cape of Good Hope. It was such as is little known in this sea; and, to make it still more agreeable, they had not one island of ice in sight.

March 17th, Captain Cook now came to a resolution to quit the high southern latitudes, and to proceed to New Zealand, to look for the Adventure, and to refresh his people.

This day they saw several porpoises, into one of which Mr. Cooper struck a harpoon; but, as the ship was running seven knots, it broke its hold, after towing it some minutes, and before they could deaden the ship's way.

As the wind, which continued between the north and west, would not permit them to ~~be~~ at Van Dieman's Land, they shaped their course to New Zealand; and being under

under no apprehensions of meeting with any danger, the captain was not backward in carrying sail.

For the three days past the mercury in the thermometer had risen to forty-six, and the weather was quite mild. Seven or eight degrees of latitude had made a surprising difference in the temperature of the air, which they felt with an agreeable satisfaction.

On the 25th, they were before the entrance of a bay, which they had mistaken for Dusky Bay, being deceived by some islands that lay in the mouth of it.

Fearing to run, in thick weather, into a place to which they were strangers, and seeing some breakers and broken ground a-head, they tacked in twenty-five fathom water, and stood out to sea.

On the 26th, they steered and entered Dusky Bay about noon. In this bay they were all strangers; in Captain Cook's former voyage, he only discovered and named it.

After running about two leagues up the bay, and passing several of the isles which lay in it, they brought to, and hoisted out two boats; one of which was sent away with an officer round a point on the larboard hand, to look for anchorage. This he found, and signified the same by signal. They then followed with the ship, and anchored in fifty fathoms water, so near the shore as to reach it with an anchor. This was on Friday the 26th of March, at three in the afternoon, after having been one hundred and seventeen days at sea; in which time they sailed three thousand six hundred and sixty leagues, without having once sight of land.

After such a long continuance at sea, in a high southern latitude, it is but reasonable to think that many of the people must be ill of the scurvy. The contrary, however, happened. Sweet wort had been given to such as were scorbutic. This had so far the desired effect, that they had only one man on board that could be called very ill of this disease; occasioned chiefly by a bad habit of body, and a complication of other disorders.

Their first care, after the ship was moored, was to send a boat and people a fishing; in the mean time, five of the gentlemen killed a seal, out of many that were upon a rock, which made them a fresh meal.

The fishing-boat was very successful, returning with fish sufficient for all hands for supper; and in a few hours in the morning, caught as many as served for dinner. This gave them certain hopes of being plentifully supplied with this article. Nor did the shores and woods appear less destitute of wild fowl; so that they hoped to enjoy, with ease, what, in their situation, might be called the luxuries of life. This determined them to stay some time in this bay, in order to examine it thoroughly; as no one had ever landed before, on any of the southern parts of this country.

About one hundred yards from the stern was a fine stream of fresh water. Thus situated, they began to clear places in the woods, in order to set up the astronomer's observatory, the forge to repair their iron-work, tents for the sail-makers and coopers to repair the sails and casks in; to land the empty casks, to fill water, and to cut down wood for fuel; all of which were absolutely necessary occupations. They also began to brew beer from the branches or leaves of a tree, which much resembles the American black spruce.

The few sheep and goats they had left were not likely to fare well, there being no grass here but what was coarse and harsh. It was, however, not so bad, but it was expected they would devour it with great greediness, but they were the more surprised to find they would not taste it; nor did they seem over fond of the leaves of more

tender plants. Upon examination they found their teeth loose; and that many of them had every other symptom of an inveterate sea scurvy. Out of four ewes and two rams, which Captain Cook brought from the Cape, with an intent to put ashore in this country, he had only been able to preserve one of each; and even these were in so bad a state, that it was doubtful if they could recover, notwithstanding all the care possible had been taken of them.

On the 28th, a canoe appeared, and came within musquet shot of the ship. There were in it seven or eight people. They remained looking at the ship for some time, and then returned; signs of friendship did not prevail on them to come nearer. After dinner the captain took two boats and went in search of them. They found a canoe hauled upon the shore near to two small huts, where were several fire-places, some fishing-nets, a few fish lying on the shore, and some in the canoe, but saw no people; they probably had retired into the woods. After a short stay, and leaving in the canoe some medals, looking-glasses, beads, &c. they embarked and rowed to the head of the cove, where they found nothing remarkable. In returning back they put ashore at the same place as before; but still saw no people.

On the 6th, the captain discovered a fine capacious cove, in the bottom of which is a fresh water river; on the west side several beautiful small cascades; and the shores are so steep \*that a ship might lie near enough to convey the water into her by a hose. In this cove they shot fourteen ducks, besides other birds, which occasioned its being called Duck Cove.

As they returned in the evening, they had a short interview with three of the natives, one man and two women. They were the first that discovered themselves on the north-east point of Indian Island, named so on this occasion: the man hallooed to them. He stood with his club in his hand upon the point of a rock, and behind him, at the skirts of the wood, stood the two women, with each of them a spear. The man could not help discovering great signs of fear when they approached the rock with the boat. He however stood firm; nor did he move to take up some things that were thrown to him. At length they landed, went up and embraced him; and presented him with such articles as they had, which at once dissipated his fears. Presently after they were joined by the two women, and some of the seamen. After this, they spent about half an hour in chit-chat, little understood on either side, in which the youngest of the two women bore by far the greatest share. This occasioned one of the seamen to say, that women did not want tongue in any part of the world. Night approaching, obliged them to take leave of them; when the youngest of the two women, whose volubility of tongue exceeded every thing they ever met with, gave them a dance; but the man viewed them with great attention.

Next morning they made the natives another visit accompanied by Mr. Forster and Mr. Hodges, carrying with them various articles, which were presented to them, and which were received with a great deal of indifference, except hatchets and spike-nails; these they most esteemed. This interview was at the same place as last night; and now they saw the whole family. It consisted of the man, his two wives (as we supposed), the young woman before mentioned, a boy about fourteen years old, and three small children, the youngest of which was at the breast. They were all well-looking, except one woman, who had a large wen on her upper lip, which made her disagreeable; and she seemed, on that account, to be in a great measure neglected by the man. They conducted them to their habitation, which was but a little way within the skirts of the wood, and consisted of two mean huts made of the bark of trees. Their canoe, which was a small double one, just large enough to transport the

the whole family from place to place, lay in a small creek near the huts. During their stay, Mr. Hodges made drawings of most of them; this occasioned them to give him the name of Toe-toe, which word was supposed to signify marking or painting. When they took leave, the chief presented Captain Cook with a piece of cloth or garment of their own manufacturing, and some other trifles. He at first thought it was meant as a return for the presents he had made him; but he was soon undeceived, by expressing a desire for one of their boat cloaks. He took the hint, and ordered one to be made for him of red baize as soon as he got on board; where rainy weather detained him the following day.

The 9th, being fair weather, they paid the natives another visit. They found them at their habitations, all dressed and dressing in their very best, with their hair combed and oiled, tied up upon the crowns of their heads, and stuck with white feathers. Some wore a fillet of feathers round their heads; and all of them had bunches of white feathers stuck in their ears. Thus dressed, and all standing, they received them with great courtesy. Captain Cook presented the chief with the cloak he had got made for him, with which he seemed so well pleased, that he took his patoo-patoo from his girdle, and gave it in return. After a short stay, they took leave.

On the 12th, several of the natives came and set down on the shore abreast of the ship. The captain now caused the bagpipes and fife to play, and the drum to beat. The two first they did not regard, but the latter caused some little attention in them; nothing, however, could induce them to come on board. But they entered with great familiarity into conversation (little understood) with such of the officers and seamen as went to them, paying much greater regard to some than to others; these, it was supposed, they took for females. To one man, in particular, the young woman shewed an extraordinary fondness until she discovered his sex, after which she would not suffer him to come near her. Whether it was that she before took him for one of her own sex; or that the man, in order to discover himself, had taken some liberties with her which she thus resented, is not known.

On the morning of the 15th, after several days rain, the weather became clear. The captain set out with two boats to survey the north-west side of the bay, accompanied by the two Mr. Forsters and several of the officers, whom he detached in one boat to Goose Cove, where they intended to lodge the night, while he proceeded in the other, examining the harbours and isles which lay in his way. In the doing of this, he picked up about a score of wild fowl, and caught fish sufficient to serve the whole party; and reaching the place of rendezvous a little before dark, he found all the gentlemen out duck-shooting: they however soon returned, not overloaded with game. By this time the cooks had done their parts, in which little art was required, and after a hearty repast on what the day had produced, they lay down to rest; but they took care to rise early the next morning in order to have the other bout among the ducks before they left the cove.

Accordingly, at day-light they prepared for the attack. Some, who had reconnoitered the place before, chose their stations accordingly; whilst the captain and another remained in the boat, and rowed to the head of the cove to start the game, which they did so effectually, that out of some scores of ducks, they only detained one to themselves, sending all the rest down to those stationed below. About a mile from hence, across an isthmus, they found an immense number of wood-hens, and brought away ten couple of them. After breakfast they set out to return to the ship, which they reached by seven o'clock in the evening, with about seven dozen of wild fowl, and two seals.

On the 17th, two of the natives, the chief and his daughter, ventured on board; the captain took them both down into the cabin, where they were to breakfast. They set at table, but would not taste any of the victuals. The chief wanted to know where the captain slept, and indeed to pry into every corner of the cabin, all parts of which he viewed with some surprize. But it was not possible to fix his attention to any one thing a single moment. The works of art appeared to him in the same light as those of nature, and were as far removed beyond his comprehension. What seemed to strike them most was the number and strength of the decks, and other parts of the ship. The chief before he came aboard, presented the captain with a piece of cloth and a green talc hatchet; to Mr. Foster he also gave a piece of cloth; and the girl gave another to Mr. Hodges. This custom of making presents, before they receive any, is common with the natives of the South Sea islands; but they never saw it practised in New Zealand before. Of all the various articles which were given to the chief, hatchets and spike-nails were the most valuable in his eyes. These he never would suffer to go out of his hands after he had once laid hold of them; whereas many other articles he would lay carelessly down any where, and at last leave them behind him.

On the 20th, they went ashore to examine the head of the bay, and in their way saw some ducks, which, by their creeping through the bushes, they got a shot at, and killed one. The moment they had fired, the natives, who were not discovered before, set up a most hideous noise in two or three places close by them, and they kept up their clamouring noise, but did not follow them. Indeed they found, afterwards, that they could not; because of a branch of the river between them. The falling tide obliged them to retire out of the river to the place where they had spent the night. There they breakfasted, and afterwards embarked. Just as the captain was returning on board, he saw two men on the opposite shore, hallooing to him, which induced him to row over to them. He landed, with two others, unarmed; the two natives standing about one hundred yards from the water side, with each a spear in his hand. When the three advanced, they retired; but stood when the captain advanced alone.

It was some little time before they could be prevailed upon to lay down their spears. This, at last, one of them did; and met the captain with a grass plant in his hand, one end of which he gave him to hold, while he held the other. Standing in this manner, he began a speech, not one word of which was understood; and made some long pauses. As soon as this ceremony was over, which was not long, they saluted each other. He then took his hahow, or coat, from off his own back, and put it upon the captain; after which peace seemed firmly established. More of his people joining did not in the least alarm them; on the contrary, they saluted every one as they came up.

People were seen in the skirts of the wood, but none of them joined; probably were their wives and children.

We took leave, the natives followed them to their boat, and seeing the muskets jostle the stern, they made signs for them to be taken away, which being done, they along-side, and assisted to launch her. At this time it was necessary to look well after the muskets. These they took care not to touch, being taught by the slaughter to look upon them as instruments of death. The 21st, they went a seal hunting. The surf ran so high that they could only land in one place, where they killed ten. These animals served three purposes; the skins were made into use of for the rigging; the fat gave oil for their lamps; and the

the flesh they eat. Their haskets are equal to that of a hog, and the flesh of some of them eats little inferior to beef-steaks.

In the morning of the 23d, Mr. Pickersgill, Mr. Gilbert, and two others, went to a cove called Cascade Cove, in order to ascend one of the mountains, the summit of which they reached by two o'clock in the afternoon. In the evening they returned on board, and reported that, inland, nothing was to be seen but barren mountains with huge craggy precipices, disjoined by valleys, or rather chasms, frightful to behold.

Having five geese left out of those brought from the Cape of Good Hope, the captain went with them next morning to Goose Cove (named so on this account), where he left them. He chose this place for two reasons; first, here are no inhabitants to disturb them; and secondly, here being the most food, there is no doubt but that they will breed, and may in time spread over the whole country, and fully answer the intention in leaving them. This day they shot a white heron, which agreed exactly with Mr. Pennant's description, in his *British Zoology*, of the white herons that either now are or were formerly in England.

On the 27th they had hazy weather. In the morning Captain Cook set out, accompanied by Mr. Pickersgill and the two Mr. Forsters, to explore an inlet seen the day before. After rowing about two leagues up it, it was found to communicate with the sea, and to afford a better outlet for ships bound to the north than the one they came in by. After making this discovery, and refreshing themselves on broiled fish and wild fowl, they set out for the ship, and got on board at eleven o'clock at night. In this expedition they shot forty-four birds, sea-pies, ducks, &c. without going one foot out of their way, or causing any other delay than picking them up.

Having got the tents and every other article on board on the 28th, they weighed with a light breeze at south-west and stood up the bay for the new passage.

In the morning of the 11th of May, at nine o'clock, they weighed with a light breeze at south-east and stood out to sea. It was noon before they got clear of the land.

The country is exceedingly mountainous; a prospect more rude and craggy is rarely to be met with; for inland appears nothing but the summits of mountains of a stupendous height, and consisting of rocks that are totally barren and naked, except where they are covered with snow. But the land bordering on the sea coast, and all the islands, are thickly clothed with wood, almost down to the water's edge. The trees are of various kinds, such as are common to other parts of the country, and are fit for the shipwright, house-carpenter, cabinet-maker, and many other uses.

Here are, as well as in all other parts of New Zealand, a great number of aromatic trees and shrubs, most of the myrtle kind; but amidst all this variety, there were none which bore fruit fit to eat.

In many parts the woods were so over-run with supple-jacks, that it is scarcely possible to force one's way amongst them. Several were fifty or sixty fathoms long.

The soil is a deep black mould, evidently composed of decayed vegetables, and so loose that it sinks under you at every step. Except the flax or hemp plant, and a few other plants, there is very little herbage of any sort. What Dusky Bay most abounds with is fish: a boat with six or eight men, with hooks and lines, caught daily sufficient to serve the whole ship's company. Of this article the variety is almost equal to the plenty, and of such kinds as are common to the more northern coasts; but some are superior, and in particular the cole fish, as it was called, which is both larger and finer flavoured than any they had seen before, and was, in the opinion of most on board the highest luxury the sea afforded. The shell fish are, muscles, cockles, scallops, cray fish, and

and many other forts. These are to be found in great numbers about this bay, on the small rocks and isles near the sea-coast.

They found here five different kinds of ducks, some of which Captain Cook did not recollect to have any where seen before. The largest are as big as a Muscovy duck, with a very beautiful variegated plumage, on which account they called it the Painted Duck; both male and female have a large white spot on each wing; the head and neck of the latter is white, but all the other feathers, as well as those on the head and neck of the drake, are of a dark variegated colour.

For three or four days after they arrived, and were clearing the woods to set up their tents, &c. a four-footed animal was seen by three or four of the sailors, but as no two gave the same description of it, it is not easy to say of what kind it is. All, however, agreed, that it was about the size of a cat, with short legs, and of a mouse colour. One of the seamen, and he who had the best view of it, said it had a bushy tail, and was the most like a jackall of any animal he knew. The most probable conjecture is, that it is of a new species.

The most mischievous animals here are the small black sand-flies, which are very numerous, and exceedingly troublesome. Wherever they bite they cause a swelling, and such intolerable itching, that it is not possible to refrain from scratching, which at last brings on ulcers like the small-pox.

The inhabitants of this bay are of the same race of people with those in the other parts of this country, speak the same language, and observe nearly the same customs. These indeed seem to have a custom of making presents before they receive any; in which they come nearer the Otaheitans than the rest of their countrymen. What could induce three or four families (for there does not appear to be more) to separate themselves so far from the society of the rest of their fellow creatures, is not easy to guess. Few as they are, they live not in perfect amity one family with another. For if they did, why do they not form themselves into some society? a thing not only natural to man, but observed even by the brute creation.

After leaving Dusky Bay, they steered for Queen Charlotte's Sound, where they expected to find the Adventure. In this passage they met with nothing remarkable or worthy of notice, till the 17th at four o'clock in the afternoon, when the sky became suddenly obscured by dark dense clouds, and seemed to forbode much wind. Presently after six water-spouts were seen. Four rose and spent themselves between them and the land; that is to the south-west, the fifth was without them; the sixth appeared in the south-west, at the distance of two or three miles from them. Its progressive motion was to the north-east, not in a straight but in a crooked line, and passed within fifty yards of the stern, without their feeling any of its effects. The diameter of the base of this spout was judged to be about fifty or sixty feet; that is, the sea within this space was agitated, and foamed up to a great height. From this a tube or round body was formed, by which the water, or air, or both, was carried in a spiral stream up to the clouds. Some of the sailors said, they saw a bird in the one near them; which was whirled round like a fly of a jack as it was carried upwards. During the time these spouts lasted, they had, now and then, light puffs of wind from all points of the compass. From the ascending motion of the bird, and several other circumstances, it is very plain, that these spouts are caused by whirlwinds; and that the water in them was violently hurried upwards, and did not descend from the clouds as is generally supposed. The first appearance of them is by the violent agitation and rising up of the water; and presently after, you see a round column or tube forming from the clouds above, which  
appa-



apparently descends till it joins the agitated water below. Captain Cook says, apparently, because he believes it not to be so in reality, but that the tube is already formed from the agitated water below, and ascends, though at first it is either too small or too thin to be seen. When the tube is formed, or becomes visible, its apparent diameter increaseth until it is pretty large; after that, it decreaseth; and at last, it breaks or becomes invisible towards the lower part. Soon after, the sea below resumes its natural state, and the tube is drawn by little and little up to the clouds, where it is dissipated. The most rational account of water-spouts, Captain Cook says, is in Mr. Falconer's Marine Dictionary, which is chiefly collected from the philosophical writings of the ingenious Dr. Franklin.

At day-light on the 18th of May, they arrived off Queen Charlotte's Sound, where they discovered the Adventure, by the signals she made; an event which every one felt with an agreeable satisfaction. At noon, Lieutenant Kemp, of the Adventure, came on board; from whom they learnt that their ship had been there about six weeks. In the evening they came to an anchor in Ship Cove, near the Adventure; when Captain Furneaux came on board, and gave Captain Cook an account of his proceedings during their separation.

*Substance of Captain Furneaux's Narrative.*

On the 7th of February 1773, in the morning, the Resolution being about two miles ahead the wind shifting to the westward, brought on a very thick fog, so that the Adventure lost sight of her. They soon after heard a gun, the report of which they imagined to be on the larboard beam; they then hauled up south-east, and kept firing a four-pounder every half-hour; but had no answer, nor further sight of her: then they kept the course they steered before the fog came on. In the evening it began to blow hard, and was, at intervals, more clear, but could see nothing of the Resolution, which gave them much uneasiness. They then tacked and stood to the westward, to cruise in the place where they last saw her, according to agreement in case of separation; but next day came on a very heavy gale of wind and thick weather, that obliged them to bring to, and thereby prevented their reaching the intended spot. They cruized as near the place as they could get for three days, when giving over all hopes of joining company again, they bore away for winter quarters, distant fourteen hundred leagues, through a sea entirely unknown, and reduced the allowance of water to one quart per day. They were daily attended by great numbers of sea birds, and frequently saw porpoises curiously spotted white and black.

On the 1st of March, they bore away for the land laid down in the charts by the name of Van Diemen's Land, discovered by Tasman in 1642, and supposed to join to New Holland.

On the 9th of March, they saw the land bearing north-north-east, about eight or nine leagues distant. It appeared moderately high, and uneven near the sea. They hauled immediately up for it, and by noon were within three or four leagues of it. Soundings from forty-eight to seventy fathoms, sand and broken shells. \*Here the country is hilly and well clothed with trees; they saw no inhabitants.

The morning on the 10th of March being calm, the ship, then about four miles from the land, sent the great cutter on shore with the second lieutenant, to find if there was any harbour or good bay. Soon after, it beginning to blow very hard, they made the signal for the boat to return several times, but they did not see or hear any thing of it; the ship then three or four leagues off, which gave them much uneasiness, as there

was

was a very great sea. At half past one P.M. to their great satisfaction, the boat returned on board safe. They landed, but with much difficulty; and saw several places where the Indians had been, and one they lately had left, where they had a fire, with a great number of pearl scallop-shells round it, which shells they brought on board, with some burnt sticks and green boughs. The weather obliged them to return without investigating the place properly: they saw no part to anchor at with safety.

On the 16th, they passed Maria's Islands, so named by Tasman; they appear to be the same as the main land. The land hereabouts is much pleasanter, low, and even; but no signs of a harbour or bay, where a ship might anchor with safety.

They stood to the eastward for Charlotte's Sound, with a light breeze at north-west, in the morning of the 5th of April, and on the 6th they had the sound open, but the wind being down, it obliged them to work up under the western shore, as the tide sets up strong there when it runs down in mid-channel. At ten, the tide being at ebb, they were obliged to come to with the best bower in thirty-eight fathoms, close to some white rocks. As they sailed up the sound they saw the tops of high mountains covered with snow, which remains all the year; about five o'clock on the 7th, anchored in Ship Cove, in ten fathoms water.

The two following days were employed in clearing a place on Mortuara Island for erecting tents for the sick (having then several on board much afflicted with the scurvy), the sail-makers and coopers.

On the 9th, they were visited by three canoes with about sixteen of the natives; and to induce them to bring fish and other provisions, they gave them several things, with which they seemed highly pleased. One of their people seeing something wrapped up in a better manner than common, had the curiosity to examine what it was; and, to his great surprize, found it to be the head of a man lately killed. They were very apprehensive of its being forced from them; and particularly the man who seemed most interested in it, whose very flesh crept on his bones for fear of being punished by them, as Captain Cook, on a former voyage, had expressed his great abhorrence of this unnatural act. They used every method to conceal the head, by shifting it from one to another; and by signs endeavouring to convince them that there was no such thing among them, though they had seen it but a few minutes before. They then took their leave, and went on shore.

They frequently mentioned Tupia, which was the name of the native of George's Island (or Otaheite,) brought here by the Endeavour, and who died at Batavia; and when they told them he was dead, some of them seemed to be very much concerned, and, as well as they could understand them, wanted to know whether he was killed, or if he died a natural death. By these questions, they are the same tribe Captain Cook saw. In the afternoon, they returned again with fish and fern roots, which they sold for nails and other trifles; though the nails are what they set the most value on. The man and woman who had the head did not come off again.

Next morning the natives returned, to the number of fifty or sixty, with their chief at their head (as was supposed) in five double canoes. They gave their implements of war, stone hatchets, and clothes, &c. for nails and old bottles, which they put a great value on. A number of the head men came on board, and it was with some difficulty they got them out of the ship by fair means; but on the appearance of a musquet with a fixed bayonet, they all went into their canoes very quickly.

On the 11th of May, they felt two severe shocks of an earthquake, but received no kind of damage. On the 17th they had the pleasure of seeing the Resolution off the mouth of the Sound. They immediately sent out the boats to her assistance to tow her in,

in, it being calm. Both ships felt uncommon joy at their meeting, after an absence of fourteen weeks.—*Here the transactions of both ships commence again.*

Captain Cook knowing that scurvy-grass, celery, and other vegetables were to be found in Queen Charlotte's Sound, went the morning after his arrival, at day-break, to look for some, and returned on board at breakfast with a boat-load. Being now satisfied, that enough was to be got for the crews of both ships, he gave orders that they should be boiled, with wheat and portable broth, every morning for breakfast; and with pease and broth for dinner; knowing from experience, that these vegetables, thus dressed; are extremely beneficial in removing all manner of scorbutic complaints.

In the morning of the 20th, he sent ashore, to the watering-place near the Adventure's tent, the only ewe and ram remaining, of those which he had brought from the Cape of Good Hope, with intent to leave in this country. Soon after he visited the several gardens Captain Furneaux had caused to be made and planted with various articles; all of which were in a flourishing state, and, if attended to by the natives, may prove of great utility to them. The next day he set some men to work to make a garden on Long Island, which he planted with garden-seeds, roots, &c.

On the 22d in the morning, the ewe and ram he had with so much care and trouble brought to this place, were both found dead, occasioned, as was supposed, by eating some poisonous plant. Thus his hopes of stocking this country with a breed of sheep, were blasted in a moment. About noon they were visited, for the first time since they arrived, by some of the natives, who dined with them; and it was not a little they devoured. In the evening they were dismissed with presents.

In the morning of the 24th, they met a large canoe in which were fourteen or fifteen people. One of the first questions they asked was for Tupia, the person brought from Otaheite on the former voyage; and they seemed to express some concern, when they told them he was dead. These people made the same enquiry of Captain Furneaux when he first arrived.

Nothing worthy of notice happened till the 29th, when several of the natives made them a visit, and brought with them a quantity of fish, which they exchanged for nails, &c. One of these people Captain Cook took and shewed him some potatoes, planted there by Mr. Fannen, master of the Endeavour. There seemed to be no doubt of their succeeding; and the man was so well pleased with them, that he, of his own accord, began to hoe the earth up about the plants. They next took him to the other gardens, and shewed him the turnips, carrots, and parsnips, roots which, together with the potatoes, will be of more real use to them than any other articles they had planted. It was easy to give them an idea of these roots, by comparing them with such as they knew.

Two or three families of these people now took up their abode near the ships, employing themselves daily in fishing, and supplying them with the fruits of their labour; the good effects of which were soon felt. For they were by no means such expert fishers as the natives; nor were any of the English methods of fishing equal to theirs.

On the 2d of June, the ships being nearly ready to put to sea, Captain Cook sent on shore two goats, male and female. The former was something more than a year old; but the latter was much older. She had two fine kids, some time before they arrived in Dusky Bay, which were killed by cold. Captain Furneaux also put on shore, in Cannibal Cove, a boar and two breeding sows; so that there is reason to hope this country will, in time, be stocked with these animals, if they are not destroyed by the natives before they become wild; for afterwards they will be in no danger.

In their excursion to the east, they met with the largest seal they had ever seen. It was swimming on the surface of the water, and suffered them to come near enough to fire at it; but without effect: for, after a chase of near an hour, they were obliged to leave it. By the size of this animal, it was probably a sea lioness. It certainly bore much resemblance to the drawing in Lord Anson's voyage.

Early the next morning, some of the natives brought a large supply of fish. One of them agreed to go away with them; but afterwards, that is, when it came to the point, he changed his mind; as did some others who had promised to go with the *Adventure*. One of them desired Captain Cook to give his son a white shirt, which he accordingly did. The boy was so fond of his new dress, that he went all over the ship, presenting himself before every one that came in his way. This freedom used by him offended Old Will the ram goat, who gave him a butt with his horns, and knocked him backward on the deck. Will would have repeated his blow, had not some of the people come to the boy's assistance. The misfortune, however, seemed to him irreparable. The shirt was dirtied, and he was afraid to appear in the cabin before his father, until brought in by Mr. Forster; when he told a very lamentable story against Goury the great dog (for so they called all the quadrupeds that were on board,) nor could he be reconciled, till the shirt was washed and dried. This story, though trifling in itself, will shew how common it is to mistake these people's meaning, and to ascribe to them customs they never knew even in thought.

About nine o'clock a large double canoe, in which were twenty or thirty people, appeared in sight. The natives on board seemed much alarmed, saying that these were their enemies. Two of them, the one with a spear, and the other with a stone hatchet in his hand, mounted the arm chests on the poop, and there, in a kind of bravado, bid those enemies defiance; while the others, who were on board, took to their canoe and went ashore, probably to secure the women and children.

However, they came on board and were very peaceable. A trade soon commenced between the sailors and them. It was not possible to hinder the former from selling the clothes from off their backs for the merest trifles, things that were neither useful nor curious. This caused Captain Cook to dismiss the strangers sooner than he would have done.

June the 4th they spent their Royal Master's birth-day in festivity, having the company of captain Furneaux and all his officers. Double allowance enabled the seamen to share in the general joy.

During their stay in the sound, Captain Cook observed that this second visit made to this country, had not mended the morals of the natives of either sex. He had always looked upon the females of New Zealand to be more chaste than the generality of Indian women. Whatever favours a few of them might have granted to the people in the *Endeavour*, it was generally done in a private manner, and the men did not seem to interest themselves much in it. But now, he was told, they were the chief promoters of a shameful traffic, and that, for a spike-nail, or any other thing they valued, they would oblige the women to prostitute themselves, whether they would or no; and even without any regard to that privacy which decency required.

On the 7th of June, at four in the morning, the wind being favourable, they unmoored, and at seven weighed and put to sea, with the *Adventure* in company.

Nothing material occurred till the 29th, when Captain Cook was informed the crew of the *Adventure* was sickly; and this he found was but too true. Her cook was dead, and about twenty of her best men were down in the scurvy and flux. At this

this time, his ship had only three men on the sick list, and only one of them attacked with the scurvy. Several more, however, began to shew symptoms of it, and were put upon the wort, marmalade of carrots, rob of lemons and oranges.

To introduce any new article of food among seamen, let it be ever so much for their good, requires both the example and authority of a commander; without both of which, it will be dropt before the people are sensible of the benefits resulting from it. Many of the people, officers as well as seamen, at first disliked celery, scurvy-grass, &c. being boiled in the peas and wheat; and some refused to eat it. But as this had no effect on Captain Cook's conduct, this obstinate kind of prejudice by little and little wore off; they began to like it as well as the others.

On the 6th of August, Captain Cook sent for Captain Furneaux to dinner; from whom he learnt that his people were much better, the flux having left them; and the scurvy was at a stand. Some cyder which he happened to have, and which he gave to the scorbutic people, contributed not a little to this happy change. The weather to-day was cloudy, and the wind very unsettled. This seemed to announce the approach of the so much wished for trade-wind; which, at eight o'clock in the evening, after two hours calm, and some heavy showers of rain, they actually got at south-east.

The sickly state of the Adventure's crew made it necessary to make their best way to Otaheite, where they were sure of finding refreshments. Consequently they continued their course to the west; and at six o'clock in the evening, land was seen from the mast-head, bearing west by south. Probably this was one of Bougainville's discoveries. Captain Cook called it Doubtful Island; the getting to a place where they could procure refreshments was more an object at this time than discovery.

At day-break on the 12th, they discovered land right a-head, distant about two miles; so that day-light advised them of their danger but just in time. This proved another of these low or half-drowned islands, or rather a large coral shoal, of about twenty leagues in circuit.

The next morning at four they made sail, and at day-break saw another of these low islands, which obtained the name of Adventure Island. M. de Bougainville very properly calls this low cluster of overflowed isles the Dangerous Archipelago. The smoothness of the sea sufficiently convinced them that they were surrounded by them, and how necessary it was to proceed with the utmost caution, especially in the night.

On the 15th, at five o'clock in the morning, they saw Osnaburg Island, or Maitea, discovered by Captain Wallis. Soon after they brought to, and waited for the Adventure to come up with them, to acquaint Captain Furneaux, that it was his intention to put into Oaiti-piha Bay, near the south-east end of Otaheite, in order to get what refreshments they could from that part of the island, before they went down to Matavia. This done, they made sail, and at six in the evening saw the island bearing west. They continued to stand on till midnight, when they brought to, till four o'clock in the morning; and then made sail in for the land with a fine breeze at east.

At day-break, they found themselves not more than half a league from the reef. This made it necessary to hoist out their boats to tow the ships off; but all their efforts were not sufficient to keep them from being carried near the reef. A number of the inhabitants came off in canoes from different parts, bringing with them a little fish, a few cocoa-nuts, and other fruits, which they exchanged for nails, beads, &c. Most of them knew Captain Cook again; and many enquired for Mr. Banks and others, who were with him before; but not one asked for Tupia.

The calm continuing their situation became still more dangerous. They were, however, not without hopes of getting round the western point of the reef and into the bay, till about two o'clock in the afternoon, when they came before an opening or break in the reef, through which they hoped to get with the ships. But on sending to examine it, found there was not a sufficient depth of water; though it caused such an indraught of the tide of flood through it, as was very near proving fatal to the *Resolution*; for as soon as the ships got into this stream, they were carried with great impetuosity towards the reef. The moment Captain Cook perceived this, he ordered one of the warping machines, which they had in readiness, to be carried out with about four hundred fathoms of rope; but it had not the least effect. The horrors of shipwreck now stared them in the face. They were not more than two cables length from the breakers; and yet they could find no bottom to anchor, the only probable means they had left to save the ships. They, however, dropped an anchor; but before it took hold, and brought them up, the ship was in less than three fathoms water, and struck at every fall of the sea, which broke close under their stern in a dreadful surf, and threatened them every moment with shipwreck. The *Adventure* very luckily brought up close upon their bow without striking.

They presently carried out two kedge anchors, with hawfers to each. These found ground a little without the bower, but in what depth they never knew. By heaving upon them, and cutting away the bower anchor, they got the ship afloat, where they lay some time in the greatest anxiety, expecting every minute that either the kedges would come home, or the hawfers be cut in two by the rocks. At length the tide ceased to act in the same direction. All the boats were ordered to try to tow off the *Resolution*; and when they saw this was practicable, they hove up the two kedges. At that moment a light air came off from the land, which so much assisted the boats, that they soon got clear of all danger. Then they ordered all the boats to assist the *Adventure*; but before they reached her, she was under sail with the land breeze, leaving behind her three anchors, her coasting cable, and two hawfers, which were never recovered. Thus they were once more safe at sea, after narrowly escaping being wrecked on the very island they but a few days before so ardently wished to be at. The calm, after bringing them into this dangerous situation, very fortunately continued. For had the sea-breeze, as is usual, set in, the *Resolution* must inevitably have been lost, and probably the *Adventure* too.

During the time they were in this critical situation, numbers of the natives were on board and about the ships. They seemed to be insensible of danger, shewed not the least surprize, joy, or fear, when the ships were striking, and left them a little before sun-set, quite unconcerned.

They spent the night, which proved squally and rainy, making short boards; and the next morning, being the 17th, they anchored in Oaiti-piha Bay, in twelve fathoms water, about two cables length from the shore, both ships being by this time crowded with a great number of the natives, who brought with them cocoa-nuts, plantains, bananoes, apples, yams, and other roots, which they exchanged for nails and beads. To several who called themselves chiefs, Captain Cook made presents of shirts, axes and several other articles; and in return, they promised to bring hogs and fowls; a promise they never did, nor ever intended to perform.

Early in the morning Captain Cook sent the two launches, and the *Resolution's* cutter, under the command of Mr. Gilbert, to endeavour to recover the anchors they had left behind them. They returned about noon with the *Resolution's* bower anchor, but could not recover any of the *Adventure's*. The natives came off again with fruit,

as the day before, but in no great quantity. Many, however, who called themselves earees, or chiefs, came on board, partly with a view of getting presents, and partly to pilfer whatever came in their way.

One of this sort of earees the captain had most of the day in the cabin, and made presents to him and all his friends, which were not a few. At length he was caught taking things which did not belong to him, and handing them out at the quarter-gallery. Many complaints of the like nature were made to him against those on deck, which occasioned his turning them all out of the ship. The cabin guest made good haste to be gone.—The captain was so much exasperated at his behaviour, that after he had got some distance from the ship, he fired two musquets over his head, which made him quit the canoe and take to the water. He then sent a boat to take up the canoe; but as she came nearer the shore, the people from thence began to pelt her with stones. Being in some pain for her safety, as she was unarmed, he went himself in another boat to protect her, and ordered a great gun, loaded with ball, to be fired along the coast, which made them all retire from the shore, and he was suffered to bring away two canoes without the least shew of opposition. In one of the canoes was a little boy, who was much frightened; but he soon dissipated his fears, by giving him beads, and putting him on shore.—A few hours after, they were all good friends again; and the canoes were returned to the first person who came for them.

It was not till the evening of this day that any one enquired after Tupia, and then but two or three. As soon as they learned the cause of his death, they were quite satisfied; indeed it did not appear to them that it would have caused a moment's uneasiness in the breast of any one, had his death been occasioned by any other means than by sickness.

Nothing worthy of note happened on the 20th, till the dusk of the evening, when one of the natives made off with a musquet belonging to the guard on shore. Captain Cook was present when this happened, and sent some of his people after him, which would have been to little purpose, had not some of the natives, of their own accord, pursued the thief. They knocked him down, took from him the musquet, and brought it back. Fear, on this occasion, certainly operated more with them than principle. They, however, deserve to be applauded for this act of justice; for if they had not given their immediate assistance, it would hardly have been in his power to have recovered the musquet by any gentle means whatever; and by making use of any other, he was sure to lose more than ten times its value.

In the evening Captain Cook was informed that Waheatoua was come into the neighbourhood, and wanted to see him. In consequence of this information, he determined to wait one day longer in order to have an interview with this Prince. Accordingly, early the next morning, he set out in company with Captain Furneaux, Mr. Forster, and several of the natives. They found him seated on a stool, with a circle of people round him; he knew Captain Cook at first sight, he and the Prince having seen each other several times in 1769. At that time he was but a boy, and went by the name of Tearee; but upon the death of his father, Waheatoua, he took upon him that name.

After the first salutation was over, having seated the captain on the same stool with himself, and the other gentlemen on the ground by them, he began to enquire after several by name who were with him on his former voyage. He next enquired how long they would stay; and when he told him no longer than next day, he seemed sorry, asked the captain to stay some months, and at last came down to five days; promising, in that time, he should have hogs in plenty. But as he had been here already a week,  
without



without so much as getting one, he could not put any faith in this promise. The present made him consisted of a shirt, a sheet, a broad axe, spike nails, knives, looking-glasses, medals, beads, &c. In return he ordered a pretty good hog to be carried to their boat.

They staid with him all the morning, during which time he never suffered Captain Cook to go from his side, where he was seated; at length they took leave, in order to return on board to dinner. They got, in the whole, to-day, as much fresh pork as gave the crews of both ships a meal; and this in consequence of their having this interview with the chief. The 24th, early in the morning, they put to sea with a light land breeze.

The fruits they got here greatly contributed towards the recovery of the Adventure's sick people. Many of them who had been so ill as not to be able to move without assistance, were in this short time so far recovered, that they could walk about of themselves. It was not till the evening of this day that they arrived in Matavia Bay.

Before they got to an anchor, their decks were crowded with the natives; many of whom Captain Cook knew, and almost all of them knew him. A great crowd was assembled together upon the shore, amongst whom was Otoo their King. The captain was just going to pay him a visit, when he was told he was *mataow'd*, and gone to Oparree.

He let out on the 26th for Oparree, accompanied by Captain Furneaux, Mr. Forster, and others, Maritata and his wife. As soon as they landed, they were conducted to Otoo, whom they found seated on the ground, under the shade of a tree, with an immense crowd round him. After the first compliments were over, he presented him with such articles as were supposed to be most valuable in his eyes, well knowing that it was his interest to gain the friendship of this man. He also made presents to several of his attendants; and, in return, they offered him cloth, which he refused to accept, telling them that what he had given was for *tioy* (friendship). The King enquired for Tupia, and all the gentlemen that were with the captain in his former voyage, by name. He promised that they should have some hogs the next day; but he had much ado to obtain a promise from him to visit him on board. He said he was, *mataou no te paupoue*, that is, afraid of the guns. Indeed all his actions shewed him a timorous Prince. He was about thirty years of age, six feet high, and a fine, personable, well-made man as one can see. All his subjects appeared uncovered before him, his father not excepted. What is meant by uncovering, is the making bare the head and shoulders, or wearing no sort of cloathing above the breast.

On the 27th, early in the morning, Otoo, attended by a numerous train, paid them a visit. He first sent into the ship a large quantity of cloth, fruits, a hog, and two large fish; and, after some persuasion, came aboard himself, with his sister, a younger brother, and several more attendants. To all of them they made presents. Captain Furneaux presented the King with two fine goats, male and female, which, if taken care of, or rather, if no care at all is taken of them, will no doubt multiply.

Very early in the morning on the 28th, they had another visit from Otoo, who brought more cloth, a pig, and some fruit. His sister, who was with him, and some of his attendants, came on board; but he and others went to the Adventure, with the like presents to Captain Furneaux. It was not long before he returned with Captain Furneaux on board the Resolution, when Captain Cook made him a handsome return for the present he had brought him, and dressed his sister out in the best manner he could. The King's brother, and one or two more were covered before him to-day. When Otoo came into the cabin, Ereti and some of his friends were sitting there. The

The moment they saw the King enter, they stripped themselves in great haste, being covered before. Seeing Captain Cook took notice of it, they said earee, earee; giving him to understand that it was on account of Otoo being present. This was all the respect they paid him; for they never rose from their seats, nor made any other obeisance. When the King thought proper to depart, he was carried to Oparree in a boat; where Captain Cook entertained him, and his people, with the bagpipes (of which music they are very fond), and dancing by the seamen. He, in return, ordered some of his people to dance also, which consisted chiefly of contortions. There were, however, some who could imitate the seamen tolerably well, both in country dances and hornpipes.

Next morning after breakfast they took a trip to Oparree, again to visit Otoo. They made him up a present of such things as he had not seen before. One article was a broadsword; at the sight of which he was so intimidated, that Captain Cook had much ado to persuade him to accept of it, and to have it buckled upon him; where it remained but a short time, before he desired leave to take it off and send it out of his sight.

Soon after they were conducted to the theatre; where they were entertained with a dramatic heava, or play, in which were both dancing and comedy. The performers were five men, and one woman, who was no less a person than the King's sister. The music consisted of three drums only; it lasted about an hour and an half, or two hours, and upon the whole, was well conducted. It was not possible for them to find out the meaning of the play. Some part seemed adapted to the present time, as Captain Cook's name was frequently mentioned. Other parts were certainly wholly unconnected with them. The dancing-dress of the lady was very handsome, being decorated with tassels, made of feathers, hanging from the waist downward. As soon as all was over, the King himself desired Captain Cook to depart; and sent into the boat different kinds of fruit, and fish ready dressed. With this they returned on board; and the next morning the King sent them more fruit, and several small parcels of fish.

Nothing farther remarkable happened till ten o'clock in the evening, when they were alarmed with the cry of murder, and a great noise, on shore, near the bottom of the bay, at some distance from the encampment. Captain Cook suspected that it was occasioned by some of his own people, and immediately armed a boat, and sent on shore, to know the occasion of this disturbance, and to bring off such of their people as should be found there. The boat soon returned with three marines, and a seaman. Some others belonging to the Adventure, were also taken, and being all put under confinement, the next morning the Captain ordered them to be punished according to their deserts. He did not find that any mischief was done, and the people would confess nothing. This disturbance was supposed to be occasioned by their making too free with the women. Be this as it will, the natives were so much alarmed, that they fled from their habitations in the dead of the night, and the alarm spread many miles along the coast. For when Captain Cook went to visit Otoo, in the morning, by appointment, he found him removed, or rather fled, many miles from the place of his abode. Even there he was obliged to wait some hours, before he could see him at all; and when he did, he complained of the last night's riot.

As this was intended to be the last visit, Captain Cook had taken with him a present suitable to the occasion. Among other things were three Cape sheep, which he had seen before and asked for; for these people never lose a thing by not asking for it. He was much pleased with them; though he could be but little benefited, as they were

all wethers, a thing he was made acquainted with. The presents he got at this interview entirely removed his fears, and opened his heart so much, that he sent for three hogs, which he presented to them; one of them was very small.

They now took leave, and informed him they should quit the island the next day; at which he seemed much moved, and embraced the captain several times.

On the 1st of September, the ships unmoored. Our old friend Pottatou, his wife, or mistress, and some more of his friends, came in order to visit the captain. They brought him a present of two hogs, and some fish; and Mr. Pickersgill got two more hogs, by exchange, from Oamo: for he went in the boat as far as Paparra, where he saw old Oberea. She seemed much altered for the worse, poor, and of little consequence. The wind, which had blown westerly all day, having shifted at once to the east, they put to sea; and dismissed their friends sooner than they wished to go; but well satisfied with the reception they had met with.

Some hours before they got under sail, a young man, whose name was Poreo, came and desired the captain would take him with him; he consented, thinking he might be of service on some occasions. Many more offered themselves, but he refused to take them. This youth asked for an axe and a spike-nail for his father, who was then on board. He had them accordingly, and they parted just as they were getting under sail, more like two strangers than father and son. This raised a doubt whether it was so; which was farther confirmed by a canoe, conducted by two men, coming alongside, as they were standing out of the bay, and demanding the young man in the name of Otoo. He now saw that the whole was a trick to get something from him; well knowing that Otoo was not in the neighbourhood, and could know nothing of the matter. Poreo seemed, however, at first undetermined whether he should go or stay; but he soon inclined to the former. The captain then told them to return the axe and nails, and then he should go (and so he really should); but they said they were ashore, and so departed. Though the youth seemed pretty well satisfied, he could not refrain from weeping when he viewed the land astern.

As soon as they were clear of the bay, and their boats in, they directed their course for the island of Huaheine, where they intended to touch. They made it the next day, and spent the night making short boards under the north end of the island. At day-light in the morning of the 3d, they made sail for the harbour of Owharre; in which the Resolution anchored, about nine o'clock, in twenty-four fathoms water. Several of the natives by this time had come off, bringing with them some of the productions of the island; and as soon as the ships were in safety, Captain Cook landed with Captain Furneaux, and was received by the natives with the utmost cordiality. Some presents were distributed among them; and, presently after, they brought down hogs, fowls, dogs, and fruits, which they willingly exchanged for hatchets, nails, beads, &c. The like trade was soon opened on board the ship; so that they had a fair prospect of being plentifully supplied with fresh pork and fowls; and, to people in their situation, this was no unwelcome thing.

Early the next morning, Lieutenant Pickersgill sailed with the cutter on a trading party, towards the south end of the isle. Captain Cook also sent another trading party on shore near the ships, with which he went himself, to see that it was properly conducted at the first setting out, a very necessary point to be attended to.

On the 4th, Captain Cook wanted to go to Oree, the King; but was told he would come to him; which he accordingly did, fell upon his neck, and embraced him. This was by no means ceremonious; the tears, which trickled plentifully down his venerable old cheeks, sufficiently bespoke the language of his heart. His friends were  
also

also introduced to them, to whom they made presents. In return he gave them a hog and a quantity of cloth, promising that all their wants should be supplied; and it will soon appear how well he kept his word. At length they took leave, and returned on board; and some time after Mr. Pickersgill returned also with fourteen hogs. Many more were got by exchanges on shore and alongside the ships, besides fowls and fruits in abundance.

This good old chief paid them a visit early in the morning on the 5th, together with some of his friends, bringing a hog and some fruit. He carried his kindness so far as not to fail to send every day, for Captain Cook's table, the very best of ready dressed fruit and roots, and in great plenty. Lieutenant Pickersgill being again sent with the two boats in search of hogs, returned in the evening with twenty-eight; and about four times that number were purchased on shore and alongside the ships.

Next day the people crowded in from every part with hogs, fowls, and fruit, so that they presently filled two boats. Oree himself presented a large hog and a quantity of fruit. Oree and Captain Cook were professed friends in all the forms customary among them; and he seemed to think that this could not be broken by the act of any other persons.

On the 7th, early in the morning, while the ships were unmooring, Captain Cook went to pay his farewell visit to Oree, accompanied by Captain Furneaux and Mr. Forster. They took with them, for a present, such things as were not only valuable, but useful. He also left with him the inscription plate he had before in keeping, and another small copper-plate, on which were engraved these words: "Anchored here, His Britannic Majesty's ships Resolution and Adventure, September 1773;" together with some medals, all put up in a bag; of which the chief promised to take care, and to produce to the first ship or ships that should arrive at the island. He then gave a hog; and after trading for six or eight more, and loading the boat with fruit, they took leave, when the good old chief embraced the Captain with tears in his eyes. When they returned to the ships, they found them crowded round with canoes full of hogs, fowls, and fruit, as at their first arrival. Oree came on board and staid till they were a full half league out at sea; then took a most affectionate leave, and went away in a canoe, conducted by one man and himself, all the others having gone long before.

During their short stay at the small but fertile isle of Huaheine, they procured to both ships not less than three hundred hogs, besides fowls and fruits; and had they staid longer, might have got many more; for none of these articles of refreshment were seemingly diminished, but appeared every where in as great abundance as ever.

Before they quitted this island, Captain Furneaux agreed to receive on board his ship a young man named Omai, a native of Ulitea, where he had had some property, of which he had been dispossessed by the people of Bolabola. Captain Cook wondered that Captain Furneaux would encumber himself with this man, who in his opinion was not a proper sample of the inhabitants of these happy islands, not having any advantage of birth or acquired rank, nor being eminent in shape, figure, or complexion; for their people of the first rank are much fairer, and usually better behaved, and more intelligent, than the middling class of people, among whom Omai is to be ranked. The Captain, however, since his arrival in England, has been convinced of his error; for excepting his complexion, (which is undoubtedly of a deeper hue than that of the earees, or gentry, who, as in other countries, live a more luxurious life, and are less exposed to the heat of the sun,) he doubts whether any other of the natives

natives would have given him more general satisfaction by his behaviour among them. —“ Omai has certainly a very good understanding, quick parts, and honest principles; he is of good natural behaviour, which rendered him acceptable to the best company, and a proper degree of pride, which taught him to avoid the society of persons of inferior rank. He has passions of the same kind as other young men, but has judgment enough not to indulge them in any improper degree. I do not imagine that he has any dislike to liquor, and if he had fallen into company where the person who drank the most met with the most approbation, I have no doubt, but that he would have endeavoured to gain the applause of those with whom he associated; but, fortunately for him, he perceived that drinking was very little in use but among inferior people, and as he was very watchful into the manners and conduct of the persons of rank who honoured him with their protection, he was sober and modest, and I never heard that, during the whole time of his stay in England, which was two years, he ever once was disguised with wine, or ever shewed an inclination to go beyond the strictest rules of moderation.

“ Soon after his arrival in London, the Earl of Sandwich, — the first lord of the Admiralty, introduced him to His Majesty at Kew, when he met with a most gracious reception, and imbibed the strongest impression of duty and gratitude to that great and amiable Prince, which I am persuaded he will preserve to the latest moment of his life. During his stay among us, he was caressed by many of the principal nobility, and did nothing to forfeit the esteem of any one of them; but his principal patrons were the Earl of Sandwich, Mr. Banks, and Dr. Solander; the former probably thought it a duty of his office to protect and countenance an inhabitant of that hospitable country, where the wants and distresses of those in his department had been alleviated and supplied in the most ample manner; the others, as a testimony of their gratitude for the generous reception they had met with during their residence in his country. It is to be observed, that though Omai lived in the midst of amusements during his residence in England, his return to his native country was always in his thoughts, and though he was not impatient to go, he expressed a satisfaction as the time of his return approached. He embarked with me in the *Resolution*, when she was fitted out for another voyage, loaded with presents from his several friends, and full of gratitude for the kind reception and treatment he had experienced among us.”

The chief was no sooner gone, than they made sail for Ulitea, where they intended to stop a few days. The next morning, September 8th, after making a few trips, they gained the harbour, and in the afternoon came to anchor; the natives crowded round them in their canoes, with hogs and fruit. The latter they exchanged for nails and beads; the former they refused as yet, having already as many on board as they could manage. Several they were, however, obliged to take; as many of the principal people brought off little pigs, pepper, or eavaa-root, and the young plantain trees, and handed them into the ship. In this manner did these good people welcome them to their country.

Next morning they paid a formal visit to Oreo, the chief of this part of the isle, carrying with them the necessary presents. He was seated in his own house, which stood near the water-side, where he and his friends received them with great cordiality. He expressed much satisfaction at seeing Captain Cook again, and desired that they might exchange names, which he accordingly agreed to: this is the strongest mark of friendship they can shew to a stranger. He inquired after Tupia, and all the gentlemen, by name, who were with him when he first visited the island. After they had made

made the chief and his friends the necessary presents, they went on board with a hog and some fruit, received from him in return; and in the afternoon he gave them another hog, still larger, without asking for the least acknowledgment.

After breakfast, on the 10th, Captain Furneaux and Captain Cook paid the chief a visit; and they were entertained by him with such a comedy, or dramatic heava, as is generally acted in these isles. The music consisted of three drums; the actors were seven men, and one woman, the chief's daughter. The only entertaining part of the drama, was a theft committed by a man and his accomplice, in such a masterly manner, as sufficiently displayed the genius of the people in this vice. — The theft is discovered before the thief has time to carry off his prize; then a scuffle ensues with those set to guard it, who, though four to two, are beat off the stage, and the thief and his accomplice bear away their plunder in triumph. Captain Cook says, "I was very attentive to the whole of this part, being in full expectation that it would have ended very differently. For I had before been informed that Teto (that is, the thief,) was to be acted, and had understood that the thief was to be punished with death, or a good tiparrahying (or beating), a punishment, we are told, they inflict on such as are guilty of this crime. Be this as it may, strangers are certainly excluded from the protection of this law; then they rob with impunity, on every occasion that offers."

After dinner, on the 11th, Captain Cook had a visit from Oo-oorou, the principal chief of the isle. He was introduced by Oreo, and had brought with him as a present a large hog, for which he had a handsome return. Oreo employed himself in buying hogs, and he made good bargains.

On the 16th, Captain Cook was told that his Otaheitan young man, Poreo, had taken a resolution to leave him, and was actually gone; having met with a young woman, for whom he had contracted a friendship, he went away with her, and he saw him no more.

Having now got on board a large supply of refreshments, the captain determined to put to sea the next morning, and made the same known to the chief, who promised to see him again before he departed. At four o'clock they began to unmoor, and as soon as it was light, Oreo, his son, and some of his friends, came on board. Many canoes also came off with fruit and hogs; the latter they even begged of them to take from them, calling out *Tiyo boa atoi*. — "I am your friend, take my hog, and give me an axe." But the decks were already so full of them, that they could hardly move; having on board both ships between three and four hundred. By the increase of their stock, together with what they had salted and consumed, it appeared that they got at this island four hundred, or upwards. Many indeed were only roasters; others again weighed one hundred pounds, or upwards; but the general run was from forty to sixty. It is not easy to say how many they might have got, could they have found room for all that were offered them.

The chief and his friends did not leave them till they were under sail; and before he went away, pressed them much to know if they would not return, and when? — Questions which were daily put by many of these islanders. The Otaheitan youth's leaving Captain Cook proved of no consequence, as many young men of this island voluntarily offered to come away with them: he thought proper to take on board one, who was about seventeen or eighteen years of age, named Oedidee, a native of Bola-bola, and a near relation of the great Opoony, chief of that island.

Soon after their arrival at Otaheite, they were informed that a ship, about the size of the *Resolution*, had been in at Owhairurua harbour, near the south-east end of the island, where she remained about three weeks; and had been gone about three months. They

were



were told also that four of the natives were gone away in her, whose names were *De-Bedede*—*Paodou*—*Tanadooe*—and *Opahiah*.—At this time, they conjectured this was a French ship, but on their arrival at the Cape of Good Hope, they learned that she was a Spaniard, which had been sent out from America. The Otaheiteans complained of a disease communicated to them by the people in this ship, which they said affected the head, throat, and stomach, and at length killed them. They seemed to dread it much, and were continually enquiring if they had it.—This ship they distinguished by the name of *Pahai no Pep-pe*, (ship of Peppe) and called the disease *Apa no Pep-pe*, just as they call the venereal disease *Apa no Pretane*, (English disease), though they, to a man, say it was brought to the isle by M. de Bougainville; but they thought M. de Bougainville came from *Pretane*, as well as every other ship which has touched at the isle.

The island of Otaheite, which in the year 1767 and 1768, as it were, swarmed with hogs and fowls, was now so ill supplied with these animals, that hardly any thing could induce the owners to part with them.

The people here seem to be as happy as any under heaven; and well they may, for they possess not only the necessaries; but many of the luxuries of life in the greatest profusion.

As Captain Cook had some reason to believe, that amongst their religious customs, human sacrifices were sometimes considered as necessary, he went one day to a Marai in Matavia, in company with Captain Furneaux; having with them, as they had upon all other occasions, one of their own men who spoke their language tolerably well, and several of the natives, one of whom appeared to be an intelligent sensible man. In the Marai was a Tupapow, on which lay a dead corpse and some viands. He began with asking questions relating to the several objects before him; if the plantains, &c. were for the Eatua? If they sacrificed to the Eatua, hogs, dogs, fowls, &c. To all of which he answered in the affirmative.

The man of whom he made these enquiries, as well as some others, took some pains to explain this custom to them; but they were not masters enough of their language to understand them. He has since learnt from Omai, that they offer human sacrifices to the Supreme Being.—According to his account, what men shall be so sacrificed, depends on the caprice of the high priest, who, when they are assembled on any solemn occasion, retires alone into the house of God, and stays there some time. When he comes out, he informs them that he has seen and conversed with their great God, (the high priest alone having that privilege,) and that he has asked for a human sacrifice, and tells them that he has desired such a person, naming a man present, whom most probably the priest has an antipathy against. He is immediately killed, and so falls a victim to the priest's resentment, who, no doubt (if necessary) has address enough to persuade the people that he was a bad man.

Great injustice has been done to the women of Otaheite and the Society Isles, by those who have represented them, without exception, as ready to grant the last favour to any man who will come up to their price. But this is by no means the case; the favours of married women, and also the unmarried of the better sort, are as difficult to be obtained here as in any other country whatever. Neither can the charge be understood indiscriminately of the unmarried of the lower class, for many of these admit of no such familiarities. That there are prostitutes here as well as in other countries, is very true, perhaps more in proportion, and such were those who came on board the ship, and frequented the post the people had on shore. By seeing these mix indiscriminately with those of a different turn, even of the first rank, one is, at first, inclined to think that they are all disposed the same way, and that the only difference is in the price.

But



But the truth is, the woman who becomes a prostitute, does not seem, in their opinion, to have committed a crime of so deep a dye as to exclude her from the esteem and society of the community in general. On the whole, a stranger who visits England, might with equal justice, draw the characters of the women there, from those which he might meet with on board the ships in one of the naval ports, or in the purlieus of Covent-Garden and Drury-Lane. It must, however, be allowed that they are completely versed in the art of coquetry, and that very few of them fix any bounds to their conversation. It is, therefore, no wonder that they have obtained the character of libertines.

After leaving Ulitea on the 17th of September 1773, they steered to the west, and at two o'clock P. M. on the 1st of October, they saw the island of Middleburg, bearing west-south-west. As they approached the shore, two canoes, each conducted by two or three men, came boldly along-side, and some of them entered the ship without hesitation. This mark of confidence gave Captain Cook a good opinion of these islanders, and determined him to visit them if possible. They found good anchorage, and came to in twenty-five fathoms water. They had scarcely got to an anchor, before they were surrounded by a great number of canoes full of people, who had brought with them cloth and other curiosities, which they exchanged for nails, &c. Among them was one, whom, by the authority he seemed to have over the others, was found to be a chief; and accordingly the captain made him a present of a hatchet, spike-nails, and several other articles, with which he was highly pleased. Thus he obtained the friendship of this chief, whose name was Tioony.

Soon after, a party of them embarked in two boats, in company with Tioony, who conducted them to a little creek formed by the rocks, right abreast of the ships, where landing was extremely easy, and the boats secure against the surf. Here they found an immense crowd of people, who welcomed them on shore with loud acclamations. Not one of them had so much as a stick, or any other weapon in his hand; an indubitable sign of their pacific intentions. They thronged so thick round the boats with cloth, matting, &c. to exchange for nails, that it was some time before they could get room to land. They seemed to be more desirous to give than receive; for many who could not get near the boats, threw into them, over the others heads, whole bales of cloth, and then retired, without either asking or waiting to get any thing in return. The chief conducted us to his house, about three hundred yards from the sea, at the head of a fine lawn, and under the shade of some shaddock trees. The situation was most delightful. In front was the sea, and the ships at anchor; behind, and on each side, were plantations, in which were some of the richest productions of nature. The floor was laid with mats, on which they were placed, and the people seated themselves in a circle round them on the outside. Having the bagpipes with them, Captain Cook ordered them to be played; and, in return, the chief directed three young women to sing a song, which they did with a very good grace; and having made each of them a present, this immediately set all the women in the circle a singing. Their songs were musical and harmonious. After sitting here some time, they were conducted into one of the adjoining plantations, where the chief had another house, into which they were introduced. Bananoes and cocoanuts were set before them to eat, and a bowl of liquor prepared in their presence of the juice of eava for them to drink. But Captain Cook was the only one who tasted it; the manner of brewing it having quenched the thirst of every one else. The bowl was, however, soon emptied of its contents, of which both men and women partook.

Before they had well viewed the plantation it was noon, and they returned on board to dinner, with the chief in their company. He sat at table but eat nothing; which, as they had fresh pork roasted, was a little extraordinary. Near some of the houses, and

in the lanes that divided the plantations, were running about some hogs and very large fowls, which were the only domestic animals they saw ; and these they did not seem willing to part with, which determined them to leave this place.

The evening brought every one on board, highly delighted with the country, and the very obliging behaviour of the inhabitants, who seemed to vie with each other in doing what they thought would give pleasure. After making the chief a present, consisting of various articles, and an assortment of garden-seeds, Captain Cook gave him to understand that they were going away, at which he seemed not at all moved. While he was in the ship, or in the boat, he continued to change fish-hooks for nails, and engrossed the trade in a manner wholly to himself ; but when on shore, he did not offer to make the least exchange.

As soon as the captain was on board, they made sail down to Amsterdam. Three men belonging to Middleburg, who, by some means or other, had been left on board the *Adventure*, now quitted her, and swam to the shore ; not knowing that they intended to stop at this isle, and having no inclination, as may be supposed, to go away with them.

As soon as they opened the west side of the isle, they were met by several canoes, each conducted by three or four men. They came boldly alongside, presented them with some Eava root, and then came on board, without farther ceremony, inviting them by all the friendly signs they could make to go to their island, and pointing to the place where they should anchor ; at least they so understood them. After a few boards they anchored in Van Diemen's Road, little more than a cable's length from the breakers which line the coast.

After breakfast Captain Cook landed, accompanied by Captain Furneaux, Mr. Forster, and several of the officers ; having along with them a chief, or person of some note, whose name was Attago, who had attached himself to the captain from the first moment of his coming on board, which was before they anchored.

As soon as they were landed, all the gentlemen set out into the country, accompanied by some of the natives. But the most of them remained with Captain Furneaux and Captain Cook, who amused themselves some time in distributing presents amongst the natives.

After walking a little way into the country they returned to the landing-place, and there found Mr. Wales in a laughable though distressed situation. The boats which brought them on shore not being able to get near the landing-place, for want of a sufficient depth of water, he pulled off his shoes and stockings to walk through ; and as soon as he got on dry land, he put them down between his legs to put on again, but they were instantly snatched away by a person behind him, who immediately mixed with the crowd. It was impossible for him to follow the man bare-footed over the sharp coral rocks which compose the shore, without having his feet cut to pieces. The boat was put back to the ship, his companions had each made his way through the crowd, and he left in this condition alone. The chief soon found out the thief, and recovered his shoes and stockings. The old chief probably thinking they might want water on board, he conducted them to a plantation hard by, and showed them a pool of fresh water, though they had not made the least enquiry after any.

From hence they were conducted down to the shore of Maria Bay, or north-east side of the isle ; where, in a boat-house, was shewn a fine large double canoe not yet launched. The chief did not fail to make them sensible it belonged to himself.

Mr. Forster and his party spent the day in the country botanising, and several of the officers were out shooting. All of them were very civilly treated by the natives. A boat





boat from each ship was employed trading on shore, and bringing off their cargoes as soon as they were laden, which was generally in a short time. By this method they got cheaper, and with less trouble, a good quantity of fruit, as well as other refreshments, from people who had no canoes to carry them off to the ships.

Pretty early in the morning, the 5th of October, the pinnace was sent ashore to trade as usual; but soon returned. The officer informed the captain that the natives were for taking every thing out of the boat, and, in other respects, were very troublesome. The day before, they stole the grappling at the time the boat was riding by it, and carried it off undiscovered. It was now judged necessary to have a guard on shore, to protect the boats and people whose business required their being there; accordingly, they sent a few of the marines, under the command of Lieutenant Edgcombe.

The different trading parties were so successful as to procure for both ships a tolerable good supply of refreshments; in consequence of which, Captain Cook, the next morning, gave every one leave to purchase what curiosities they pleased. After this, it was astonishing to see with what eagerness every one caught at every thing he saw. It even went so far as to become the ridicule of the natives, who offered pieces of sticks and stones to exchange. One waggish boy took a piece of human excrement on the end of a stick, and held it out to every one he met with.

A man got into the master's cabin, through the outside scuttle, and took out some books and other things. He was discovered just as he was getting out into his canoe, and pursued by one of the boats, which obliged him to quit the canoe and take to the water. The people in the boat made several attempts to lay hold on him; but he as often dived under the boat, and at last unshipped the rudder, which rendered her ungovernable; by this means he got clear off. Some other very daring thefts were committed at the landing-place. One fellow took a seaman's jacket out of the boat, and carried it off, in spite of all that the people in her could do. Till he was pursued and fired at by them, he would not part with it; nor would he have done it then, had not his landing been intercepted by some of the crew who were on shore. The rest of the natives, who were very numerous, took very little notice of the whole transaction; nor were they the least alarmed when the man was fired at.

Attago visited Captain Cook again the next morning, the 7th, and brought with him a hog, and assisted him in purchasing several more. This day the captain was told by the officers who were on shore, that a far greater man than any they had yet seen was come to pay them a visit. Mr. Pickersgill informed them that he had seen him in the country, and found that he was a man of some consequence, by the extraordinary respect paid to him by the people. Some, when they approached him, fell on their faces, and put their head between their feet; and no one durst pass him without permission. Mr. Pickersgill, and another of the gentlemen, took hold of his arms, and conducted him down to the landing-place, where the captain found him seated with so much sullen and stupid gravity, that notwithstanding what had been told him, he really took him for an idiot, whom the people, from some superstitious notions were ready to worship. He saluted and spoke to him; but he neither answered, nor took the least notice of him or any one; nor did he alter a single feature in his countenance. This confirmed him in his opinion, and he was just going to leave him, when one of the natives undertook to undeceive him; which he did in such a manner as left no room to doubt that he was the king, or principal man on the island. Accordingly he made him a present, which consisted of a shirt, an axe, a piece of red cloth,

cloth, a looking-glass, some nails, medals, and beads. He received these things, or rather suffered them to be put upon him, and laid by him, without losing a bit of his gravity, speaking one word, or turning his head either to the right or left; sitting the whole time like a statue; in which situation he left him, to return on board, and he soon after retired. The captain had not been long on board before word was brought that a quantity of provisions had come from this chief. A boat was sent to bring it from the shore; and it consisted of about twenty baskets of roasted bananoes, four bread and yams, and a roasted pig of about twenty pounds weight. Mr. Edgcombe and his party were just re-imbarking when these were brought to the water-side, and the bearers said it was a present from the Areeke, that is, the king of the island, to the Areeke of the ship. After this they were no longer to doubt the dignity of this fullen chief, whose name was Kohagee-too-Fallangou.

The captain went on shore, and made this great man a suitable return, and immediately prepared for quitting the place. In heaving in the coasting cable, it parted in the middle of its length, being chafed by the rocks. By this accident they lost the other half, together with the anchor, which lay in forty fathoms water, without any buoy to it. The best bower cable suffered also by the rocks; by which a judgment may be formed of this anchorage. At ten o'clock they got under sail. The supplies they got at this isle were about one hundred and fifty pigs, twice that number of fowls, as many bananoes and cocoa-nuts as they could find room for, with a few yams; and had their stay been longer, they, no doubt, might have got a great deal more.

These islands were first discovered by Captain Tasman in January 1642-3; and, by him called Amsterdam and Middleburg. But the former is called by the natives Ton-ga-ta-bu, the latter Ea-oo-wee.

The produce and cultivation of Middleburgh and Amsterdam are the same; with this difference, that a part only of the former, whereas the whole of the latter, is cultivated. The lanes or roads necessary for travelling are laid out in so judicious a manner as to open a free and easy communication from one part of the island to the other. Here are no towns or villages, most of the houses are built in the plantations, with no other order than what convenience requires; they are neatly constructed, but do not exceed those in the other isles. The materials of which they are built are the same; and some little variation in the disposition of the framing is all the difference in their construction. The floor is a little raised, and covered with thick strong mats; the same sort of matting serves to inclose them on the windward side, the other being open. They have little areas before the most of them, which are generally planted round with trees, or shrubs of ornament, whose fragrant perfume the very air in which they breathe. Their household furniture consists of a few wooden platters, cocoa-nut-shells, and some wooden pillows shaped like four-footed stools or forms. Their common clothing, with the addition of a mat, serves them for bedding.

They saw no other domestic animals amongst them but hogs and fowls. The former are of the same sort as at the other isles in this sea; but the latter are far superior, being as large as any we have in Europe, and their flesh equally good, if not better. They saw no rats in these isles, nor any other wild quadrupeds except small lizards. The land birds are pigeons, turtle-doves, parrots, paroquets, owls, bald coues with a blue plumage, a variety of small birds, and large bats in abundance. The produce of the sea they knew but little of: it is reasonable to suppose that the same sorts of fish are found here as at the other isles. Their fishing instruments are the same; that is, hooks made of mother-of-pearl, gigs with two, three, or more prongs, and nets made  
of

of a very fine thread, with the meshes wrought exactly like those of Europe. But nothing can be a more demonstrative evidence of their ingenuity than the construction and make of their canoes, which, in point of neatness and workmanship, exceed every thing of the kind they saw in this sea. They are built of several pieces, sewed together with bandage, in so neat a manner, that on the outside it is difficult to see the joints. All the fastenings are on the inside, and pass through kants or ridges, which are wrought on the edges and ends of the several boards which compose the vessel, for that purpose. At each end is a kind of deck one third part of the whole length, and open in the middle. In some, the middle of the deck is decorated with a row of white shells, stuck on little pegs wrought out of the same piece which composes it. These single canoes have all out-riggers, and are sometimes navigated with sails, but more generally with paddles, the blades of which are short, and broadest in the middle. The two vessels which compose the double canoe are each about sixty or seventy feet long, and four or five broad in the middle; and each end terminates nearly in a point; so that the body or hull differs a little in construction from the single canoe, but is put together exactly in the same manner; these having a rising in the middle round the open part, in the form of a long trough, which is made of boards closely fitted together, and well secured to the body of the vessel. Two such vessels are fastened together parallel to each other, about six feet asunder, by strong cross beams, secured by bandages, to support the upper part of the risings above mentioned. Over these beams and others, which are supported by stantions fixed on the bodies of the canoes, is laid a boarded platform. All the parts which compose the double canoe, are made as strong and light as the nature of the work will admit, and may be immersed in water to the very platform, without being in danger of filling. Nor is it possible, under any circumstance whatever, for them to sink, so long as they hold together. Thus they are not only made vessels of burden, but fit for distant navigation. They are rigged with one mast, which steps upon the platform, and can easily be raised or taken down; and are sailed with a latteen sail, or triangular one, extended by a long yard, which is a little bent or crooked.

The sail is made of mats; the rope they made use of is laid exactly like those of Europe, and some of it is four or five-inch. On the platform is built a little shed or hut, which screens the crew from the sun and weather, and serves for other purposes. They also carry a moveable fire-hearth, which is a square but shallow trough of wood, filled with stones. The way into the hold of the canoe is from off the platform, down a sort of uncovered hatchway, in which they stand to bail out the water. These vessels are navigated either end foremost, and that, in changing tacks, they have only occasion to shift or jib round the sail; but of this Captain Cook says he was not certain, as he had not then seen any under sail, or with the mast and sail an end, but what were a considerable distance from him.

Their working tools are made of stone, bones, shells, &c. as at the other islands. When they viewed the work which is performed with these tools, they were struck with admiration at the ingenuity and patience of the workman. Their knowledge of the utility of iron was no more than sufficient to teach them to prefer nails to beads, and such trifles; some, but a very few, would exchange a pig for a large nail, or a hatchet. Old jackets, shirts, cloth, and even rags, were in more esteem than the best edge-tool they could give them; consequently they got but few axes but what were presents. The nails which were given by the officers and crews of both ships for curiosities, &c. with those given for refreshments, amount to no less than five hundred



could be no strangers to the affair which happened off Cape Kidnapper in the former voyage, experience had taught them to have some regard to these instruments of death.

They now stretched to the southward; presently after violent weather came on, and for two days they were beating up against a hard gale. When they arrived just in sight of port, they had the mortification to be driven off from the land by a furious storm. Two favourable circumstances attended it, which gave them some consolation; it was fair over-head, and they were not apprehensive of a lee-shore.

They continued to combat tempestuous weather till the 30th, when they lost sight of the Adventure. In the afternoon the gale abated. Captain Cook now regretted the loss of her; for had she been with him, he should have given up all thoughts of going to Queen Charlotte's Sound to wood and water, and have sought for a place to get these articles farther south, as the wind was now favourable for ranging along the coast. But their separation made it necessary for him to repair to the Sound, that being the place of rendezvous.

As they approached the land they saw smoke in several places along the shore; a sure sign that the coast was inhabited. They continued to stand to the eastward all night, in hopes of meeting with the Adventure in the morning, the 31st of October.

Seeing nothing of her then, they wore and brought-to under the fore sail and mizen-stay-sail, the wind having increased to a perfect storm. At six o'clock in the evening the wind quite ceased; but this only proved a momentary repose; for, presently after, it began to blow with redoubled fury, and obliged them to lie to under the mizen-stay-sail, in which situation they continued till midnight, when the storm lessened; and two hours after it fell calm.

On the 1st of November, at four o'clock in the morning, the calm was succeeded by a breeze from the south. Soon after it increased to a fresh gale, attended with hazy rainy weather, which gave them hopes that the north-west winds were done; for it must be observed, they were not wanting in taking immediate advantage of this favourable wind, by setting all their sails, and steering for Cape Campbell, which at noon bore north, distant three or four leagues. At two o'clock they passed the Cape, and entered the Strait with a brisk gale a-stern, and so likely to continue, that they thought of nothing less than reaching their port the next morning. Once more they were deceived; at six o'clock, being off Cloudy Bay, the favourable wind was succeeded by one from the north, which soon after veered to north-west, and increased to a fresh gale. Next morning they stretched over for the shore of Ekeinomawe. At sunrise the horizon being extraordinary clear to leeward, they looked well out for the Adventure; but as they saw nothing of her, judged she had got into the Sound. As they approached the above-mentioned shore, they discovered on the east side of Cape Teerawhitte, a new inlet they had never observed before, into which they entered and cast anchor.

Soon after they had anchored, several of the natives came off in their canoes; two from one shore, and one from the other. It required but little address to get three or four of them on board. These people were extravagantly fond of nails above every other thing. To one man the captain gave two cocks and two hens, which he received with so much indifference, as gave little hopes he would take proper care of them.

They had not been at anchor here above two hours, before the wind veered to north-east, with which they weighed, and steered to the Sound, where they arrived just at dark, with most of their sails split, and anchored in eight fathoms water.

The next morning, the 3d of November, the gale abated, and was succeeded by a few hours calm; after that a breeze sprung up at north-west, with which they weighed and ran up into Ship Cove, where they did not find the Adventure, as was expected.

The first thing they did, after mooring the ship, was to unbend all the sails; there not being one but what wanted repair. In the afternoon they gave orders for all the empty water-casks to be landed, in order to be repaired, cleaned and filled; tents to be set up for the sail-makers, coopers, and others, whose business made it necessary for them to be on shore. The next day they began to caulk the ship's sides and decks, to overhaul her rigging, repair the sails, cut wood for fuel, and set up the smith's forge to repair the iron-work; all of which were absolutely necessary.

On the 5th, (the most part of their bread being in casks), they ordered some to be opened, when, to their mortification, they found a good deal of it damaged. To repair this loss in the best manner they could, all the casks were opened, the bread was picked, and the copper oven set up, to bake such parcels of it, as, by that means, could be recovered. Some time this morning the natives stole, out of one of the tents, a bag of clothes belonging to one of the seamen. As soon as the captain was informed of it, he went to them in an adjoining cove, demanded the clothes again, and after some time spent in friendly application, recovered them.

With these people they saw the youngest of the two sows Captain Furneaux had put on shore in Cannibal Cove, when they were last here; it was lame of one of its hind legs, otherwise in good case, and very tame. If they understood these people right, the boar and other sow were also taken away and separated, but not killed. They were likewise told, that the two goats they had put on shore up the Sound, had been killed by that old rascal Goubiah. Thus all their endeavours to stock this country with useful animals were likely to be frustrated, by the very people they meant to serve. The gardens had fared somewhat better. Every thing in them, except the potatoes, they had left entirely to Nature, who had acted her part so well, that they found most articles in a flourishing state; a proof that the winter must have been mild. The potatoes had most of them been dug up; some, however, still remained, and were growing, though, it is probable, they will never be got out of the ground.

Next morning the captain went over to the cove, where the natives resided, to haul the seine; and took with him a boar and a young sow, two cocks and two hens, they had brought from the isles. These he gave to the natives, being persuaded they would take proper care of them, by their keeping Captain Furneaux's sow near five months. When they were purchasing fish of these people they shewed a great inclination to pick pockets, and to take away the fish with one hand, which they had just sold or bartered with the other. This evil one of the chiefs undertook to remove, and with fury in his eyes made a shew of keeping the people at a proper distance. The captain says, "I applauded his conduct, but at the same time kept so good a look-out, as to detect him in picking my pocket of a handkerchief, which I suffered him to put in his bosom before I seemed to know any thing of the matter, and then told him what I had lost. He seemed quite ignorant and innocent, till I took it from him; and then he put it off with a laugh, acting his part with so much address, that it was hardly possible for me to be angry with him; so that we remained good friends, and he accompanied me on board to dinner." About that time, they were visited by several strangers in four or five canoes, who brought with them fish and other articles, which they exchanged for cloth, &c. These new-comers took up their quarters in a cove near the tents; but very early the next morning moved off with six all water-casks, and with them all the people they found here on their arrival. This precipitate retreat of these last, they supposed, was owing to the theft the others had committed. They left behind them some of their dogs, and the boar that had been given them the day before, which the captain now took back again, as he had not another. The casks were

were the least loss felt by these people leaving them; while they remained they were generally well supplied with fish, at a small expence.

In unpacking the bread, four thousand two hundred and ninety-two pounds they found totally unfit to eat, and about three thousand pounds more could only be eaten by people in their situation.

The 15th being a pleasant morning, a party went over to the East Bay, and climbed one of the hills which overlooked the eastern part of the strait, in order to look for the Adventure. They had a fatiguing walk to little purpose; for when they came to the summit, they found the eastern horizon so foggy that they could not see above two miles. Mr. Forster, who was one of the party, profited by this excursion, in collecting some new plants. They now began to despair of seeing the Adventure any more, and was totally at a loss to conceive what was become of her.

From this day to the 22d nothing remarkable happened, and they were occupied in getting every thing in readiness to put to sea, being resolved to wait no longer than the assigned time for the Adventure.

Very early in the morning they were visited by a number of the natives, in four or five canoes, very few of whom they had seen before. They brought with them various articles (curiosities) which they exchanged for Otaheitean cloth, &c. At first the exchanges were very much in the sailors' favour, till an old man, who was no stranger, came and assisted his countrymen with his advice; which, in a moment, turned the trade above a thousand per cent. against them.

After these people were gone, the captain took four hogs, (that is, three sows and one boar) two cocks and two hens, which he landed in the bottom of the West Bay, carrying them a little way into the woods, where he left them as much food as would serve them ten or twelve days. This was done with a view of keeping them in the woods, lest they should come down to the shore in search of food, and be discovered by the natives.

Having now put the ship in a condition for sea, and to encounter the southern latitudes, the tents were struck and every thing got on board.

The boatwain, with a party of men, being in the woods cutting broom, some of them found a private hut of the natives, in which was deposited most of the treasure they had received from them, as well as some other articles of their own. It is very probable some were set to watch this hut; as, soon after it was discovered, they came, and took all away. But missing some things, they told some of the sailors they had stolen them; and, in the evening, came and made their complaint to Captain Cook, pitching upon one of the party as the person who had committed the theft. Having ordered this man to be punished before them, they went away seemingly satisfied, although they did not recover any of the things they had lost, nor could by any means find out what had become of them; though nothing was more certain than that something had been stolen by some of the party, if not by the very man the natives pitched upon. It was ever a maxim with the captain to punish the least crimes any of his people committed against these uncivilized nations. Their robbing them with impunity is, by no means, a sufficient reason why the Europeans should treat these uninformed people in the same manner.

Calm light airs from the north, all day, on the 23d, hindered them from putting to sea, as intended. In the afternoon, some of the officers went on shore to amuse themselves among the natives, where they saw the head and bowels of a youth, who had lately been killed, lying on the beach; and the heart stuck on a forked stick, which was fixed to the head of one of the largest canoes. One of the gentlemen bought the head and brought

brought it on board, where a piece of the flesh was broiled and eaten by one of the natives before all the officers and most of the men. Captain Cook was on shore at this time, but soon after returning on board, was informed of the above circumstance; and found the quarter-deck crowded with the natives, and the mangled head, or rather part of it, (for the under jaw and lip were wanting) lying on the tafferal. The skull had been broken on the left side, just above the temples; and the remains of the face had all the appearance of a youth under twenty.

The sight of the head, and the relation of the above circumstances, struck him with horror, and filled his mind with indignation against these cannibals. Curiosity, however got the better of his indignation, especially when he considered that it would avail but little; and being desirous of becoming an eye-witness of a fact which many doubted, he ordered a piece of the flesh to be broiled and brought to the quarter-deck, where one of these cannibals eat it with surprising avidity. This had so great an effect on some of the sailors as to make them sick. This youth had been killed in a skirmish between two parties.

That the New Zealanders are cannibals, can now no longer be doubted. The account given of this in Captain Cook's former voyage being partly founded on circumstances, was, as he afterwards understood, discredited by many persons. Few consider what a savage man is in his natural state, and even after he is in some degree civilized.

On the 25th, they weighed, with a small breeze, out of the cove. The morning before they sailed, Captain Cook wrote a memorandum, setting forth the time he arrived, the day he sailed, the route he intended to take, and such other information as he thought necessary for Captain Furneaux, in case he should put into the Sound; and buried it in a bottle under the root of a tree in the garden, which is at the bottom of the cove, in such a manner as must be found by him or any European who might put into the cove.

At day-light in the morning on the 26th, they made sail round Cape Palliser, firing guns as usual, as they ran along the shore. In this manner they proceeded till they were three or four leagues to the north-east of the Cape.

Every one being unanimously of opinion that the Adventure could neither be stranded on the coast, nor be in any of the harbours thereof, they gave up looking for her, and all thoughts of seeing her any more during the voyage, as no rendezvous was absolutely fixed upon after leaving New Zealand.

On quitting the coast, and consequently all hopes of their being joined by their consort, not a man was dejected, or thought the dangers they had yet to go through, were in the least increased by being alone.

On the 14th of December they fell in with several large islands of ice, and, about noon, with a quantity of loose ice through which they sailed. Grey albatrosses, blue peterels, pintadoes, and fulmers, were seen. As they advanced to the south-east-by-east, with a fresh gale at west, they found the number of ice-islands increase fast, also a considerable quantity of loose ice. They tacked, stretched to the north, and soon got clear of it, but not before they had received several hard knocks from the larger pieces, which, with all their care, they could not avoid. After clearing one danger they still had another to encounter; the weather remained foggy, and many large islands lay in their way; so that they had to luff for one, and bear up for another. One they were very near falling aboard of; and if it had happened, this circumstance would never have been related. These difficulties determined them to get more to the north.

On the 17th they took some ice out of the sea into their boats, for the use of the ship, but it proved to be none of the best, being chiefly composed of frozen snow; on which

account it was porous, and imbibed a good deal of salt water : but this drained off, after lying awhile on the deck, and the water then yielded was fresh. They continued to stretch to the east, with a cold northerly wind, attended with a thick fog, snow, and sleet, that decorated all their rigging with icicles.

On the 21st, they very suddenly got in amongst a cluster of very large ice islands, and a vast quantity of loose pieces ; and as the fog was exceedingly thick, it was with the utmost difficulty they were clear of them.

On the 23d, the wind being pretty moderate, and the sea smooth, they brought-to, at the outer edge of the ice, hoisted out two boats, and sent to take some up. The snow froze to the rigging as it fell, making the ropes like wires, and the sails like boards or plates of metal.

While they were taking up ice, they got two of the antarctic peterels. They are about the size of a large pigeon ; the feathers of the head, back, and part of the upper side of the wings, are of a light brown ; the belly and under side of the wings white ; the tail feathers are also white, but tipped with brown. These birds are fuller of feathers than any they had hitherto seen ; such care has nature taken to clothe them, suitable to the climate in which they live. They also saw a very large seal, which kept playing about for some time. One of their people who had been at Greenland, called it a sea-horse ; but every one else who saw it, took it for what it really was.

In the morning of the 26th, the whole sea was in a manner covered with ice, 200 large islands and upwards being seen within the compass of four or five miles.

On the 30th, several whales were seen playing about the ship, but very few birds ; islands of ice in plenty.

On the 30th of January, 1774, at four o'clock in the morning, they perceived the clouds, over the horizon to the south, to be of an unusual snow-white brightness, which they knew denounced their approach to field-ice. Soon after, it was seen from the top-mast-head ; and at eight o'clock, they were close to its edge.

It extended east and west, far beyond the reach of their sight. In the situation they were in, just the southern half of the horizon was illuminated by the rays of light reflected from the ice, to a considerable height. Ninety-seven ice-hills were distinctly seen within the field, beside those on the outside ; many of them very large, and looking like a ridge of mountains, rising one above another till they were lost in the clouds. The outer or northern edge of this immense field was composed of loose or broken ice close packed together, so that it was not possible for any thing to enter it. This was about a mile broad ; within which was solid ice in one continued compact body. It was rather low and flat (except the hills), but seemed to increase in height to the south ; in which direction it extended beyond their sight. Such mountains of ice as these, were, Captain Cook believes, never seen in the Greenland seas ; at least, not that he ever heard or read of ; so that he cannot draw a comparison between the ice here and there.

The captain says, "I will not say it was impossible any where to get farther to the south ; but the attempting it would have been a dangerous and rash enterprize, and what, I believe no man in my situation would have thought of. I, who had ambition not only to go farther than any one had been before, but as far as it was possible for man to go, was not sorry at meeting with this interruption ; as it in some measure relieved us ; at least, shortened the dangers and hardships inseparable from the navigation of the southern polar regions. Since therefore we could not proceed one inch farther to the south, no other reason need be assigned for my tacking and standing back to the north."

The captain now came to a resolution to proceed to the north, and to spend the ensuing winter within the tropic, if he met with no employment before he came there, as he

he was now well satisfied no continent was to be found in this ocean, but what must lie so far to the south as to be totally inaccessible on account of ice; and that if one should be found in the Southern Atlantic Ocean, it would be necessary to have the whole summer before them to explore it.

They now steered north, inclining to the east, and in the evening they were overtaken by a furious storm at west-south-west attended with snow and sleet. It came so suddenly upon them, that before they could take in their sails, two old top-sails, which they had bent to the yards, were blown to pieces, and the other sails much damaged.

On the 20th of February, as they advanced to the north, they felt a most sensible change in the weather. They steered west-south-west, which they thought the most probable direction to find land.

On the 25th, Captain Cook was taken ill of the bilious cholic, which was so violent as to confine him to his bed; so that the management of the ship was left to Mr. Cooper, the first officer, who conducted her much to his satisfaction. It was several days before the most dangerous symptoms of his disorder were removed; during which time Mr. Patten, the surgeon, was to him not only a skilful physician, but an affectionate nurse. When he began to recover, a favourite dog belonging to Mr. Forster fell a sacrifice to his tender stomach. They had no other fresh meat whatever on board; and the captain could eat of this flesh, as well as broth made of it, when he could taste nothing else. Thus he received nourishment and strength from food which would have made most people in Europe sick; so true it is, that necessity is governed by no law.

At eight o'clock in the morning, on the 11th of March, land was seen from the mast-head, bearing west, about twelve leagues distant. They now tacked and endeavoured to get into what appeared to be a bay, on the west side of the point, or south-east side of the island; but before this could be accomplished, night came upon them, and they stood on and off, under the land, till the next morning. This is called Easter Island, or Davis's Land.

When getting round the point, and coming before a sandy beach, they found soundings thirty and forty fathoms, sandy ground, and about one mile from the shore. Here a canoe, conducted by two men, came off. They brought with them a bunch of plantains, which they sent into the ship by a rope, and then they returned ashore. This gave the captain a good opinion of these islanders, and inspired them with hopes of getting some refreshments, of which they were in great want.

They continued to range along the coast, till they opened the northern point of the isle. While the ship was plying in, a native came on board. The first thing he did was to measure the length of the ship, by fathoming her from the taffarel to the stem; and as he counted the fathoms, they observed that he called the numbers by the same names that they do at Otaheite; nevertheless his language was nearly unintelligible to all of them.

Having anchored too near the edge of the bank, a fresh breeze from the land, about three o'clock the next morning, drove them off it; on which the captain went ashore, accompanied by some of the gentlemen, to see what the island was likely to afford. They landed at a sandy beach, where some hundreds of the natives were assembled, and who were so impatient to see them, that many of them swam off to meet the boats. Not one of them had so much as a stick or weapon of any sort in his hand. After distributing a few trinkets amongst them, they made signs for something to eat; on which they brought down a few potatoes, plantains, and sugar-canes, and exchanged them for nails, looking-glasses, and pieces of cloth.

They presently discovered that they were as expert thieves, and as tricking in their exchanges, as any people they had yet met with. It was with some difficulty they could keep the hats on their heads; but hardly possible to keep any thing in their pockets, not even what themselves had sold; for they would watch every opportunity to snatch it from them, so that they sometimes bought the same thing two or three times over, and after all did not get it.

Before they sailed from England, Captain Cook was informed that a Spanish ship had visited this isle in 1769. Some signs of it were seen among the natives; one man had a pretty good broad-brimmed European hat on; another had a jacket; and another a red silk handkerchief.

Near the place where they landed were some tall statues, which shall be described hereafter. The country appeared quite barren, and without wood; there were nevertheless several plantations of potatoes, plaintains, and sugar-canes; they also saw some fowls, and found a well of brackish water. The ship was brought to an anchor in thirty-two fathoms water, about a mile from the nearest shore.

The captain was obliged to content himself with remaining at the landing-place among the natives, as he was not yet quite recovered. They had a pretty brisk trade with them for potatoes, which they observed they dug out of an adjoining plantation; but this traffic, which was very advantageous to them, was soon put a stop to, by the owner (as they supposed) of the plantation coming down and driving all the people out of it. By this they concluded, that he had been robbed of his property, and that they were not less scrupulous of stealing from one another than from them, on whom they practised every little fraud they could think on, and generally with success; for they had no sooner detected them in one, than they found out another. A party who had been sent out in the morning to view the country, now returned. They had not proceeded far, before a middle-aged man, punctured from head to foot, and his face painted with a sort of white pigment, appeared with a spear in his hand, and walked alongside of them, making signs to his countrymen to keep at a distance, and not to molest them. When he had pretty well effected this, he hoisted a piece of white cloth on his spear, placed himself in the front, and led the way, with this ensign of peace. For the greatest part of the distance across, the ground had but a barren appearance.

On the east side, near the sea, they met with three platforms of stone-work, or rather the ruins of them. — On each had stood four of those large statues, but they were all fallen down from two of them, and also one from the third; all except one were broken by the fall, or in some measure defaced. Mr. Wales measured this one and found it to be fifteen feet in length, and six feet broad over the shoulders. Each statue had on its head a large cylindric stone of a red colour, wrought perfectly round. The one they measured, which was not by far the largest, was fifty-two inches high, and sixty-six in diameter. In some the upper corner of the cylinder was taken off in a sort of concave quarter round; but in others the cylinder was entire.

Beyond this they came to the most fertile part of the island they saw, it being interspersed with plantations of potatoes, sugar-canes, and plantain-trees, and these not so much incumbered with stones as those they had seen before; but they could find no water except what the natives twice or thrice brought them, which, though brackish and stinking, was rendered acceptable by the extremity of their thirst. They also passed some huts, the owners of which met them with roasted potatoes and sugar-canes, and placing themselves a-head of the party (for they marched in a line in order to have the benefit of the path), gave one to each man as he passed by. But at the very



time some were relieving the thirsty and hungry, there were others who endeavoured to steal from them the very things which had been given them. At last, to prevent worse consequences, they were obliged to fire a load of small shot at one who was so audacious as to snatch the bag which contained every thing they carried with them. The shot hit him on the back, on which he dropped the bag, ran a little way and then fell; but he afterwards got up and walked, and what became of him they knew not, nor whether he was much wounded. This affair occasioned some delay, and drew the natives together: they presently saw the man who had hitherto led the way, and one or two more, coming running towards them; but instead of stopping when they came up, they continued to run round them, repeating in a kind manner a few words, until they set forwards again. Then their old guide hoisted his flag, leading the way as before, and none ever attempted to steal from them the whole day afterwards.

Towards the eastern end of the island they met with a well whose water was perfectly fresh, being considerably above the level of the sea; but it was dirty, owing to the filthiness or cleanliness (call it which you will) of the natives, who never go to drink without washing themselves all over as soon as they have done; and if ever so many of them are together, the first leaps right into the middle of the hole, drinks, and washes himself without the least ceremony; after which another takes his place and does the same.

They observed that this side of the island was full of those gigantic statues before mentioned; some placed in groupes on platforms of masonry; others single, fixed only in the earth, and that not deep; and these latter are, in general, much larger than the others. Having measured one which had fallen down, they found it very near twenty-seven feet long, and upwards of eight feet over the breast or shoulders; and yet this appeared considerably short of the size of one they saw standing: its shade, a little past two o'clock, being sufficient to shelter all the party, consisting of near thirty persons, from the rays of the sun. Mr. Wales, from whom Captain Cook had this information, is of opinion that there had been a quarry here, whence these stones had formerly been dug; and that it would have been no difficult matter to roll them down the hill after they were formed.

They saw not an animal of any sort, and but very few birds; nor indeed any thing which can induce ships that are not in the utmost distress to touch at this island.

The Captain determined to leave the island the next morning, since nothing was to be obtained that could make it worth his while to stay longer. They had a calm till ten o'clock in the morning of the 16th, when a breeze sprung up at west, accompanied with heavy showers of rain, which lasted about an hour. The weather then clearing up, on the 16th of March, they got under sail, and stood to sea.

The produce of this island is sweet potatoes, yams, tara or eddy root, plantains, and sugar-canes, all pretty good, the potatoes especially, which are the best of the kind they ever tasted. Gourds they have also, but so very few, that a cocoa-nut shell was the most valuable thing they could give them. They have a few tame fowls, such as cocks and hens, small but well tasted. They have also rats, which, it seems, they eat; for they saw a man with some dead ones in his hand; and he seemed unwilling to part with them, giving them to understand they were for food. The coast seemed not to abound with fish; at least they could catch none with hook and line, and it was but very little they saw amongst the natives.

The inhabitants of this island do not seem to exceed six or seven hundred souls, and above two-thirds of those they saw were males. They either have but few females among them, or else many were restrained from making their appearance.

In general, the people of this isle are a slender race. They did not see a man that would measure six feet; so far are they from being giants, as one of the authors of Ruggewin's voyage asserts. They are brisk and active, have good features, and not disagreeable countenances, are friendly and hospitable to strangers, but as much addicted to pilfering as any of their neighbours.

The women's clothing is a piece or two of quilted cloth about six feet by four, or a mat. One piece wrapped round their loins, another over their shoulders, make a complete dress. But the men, for the most part, are in a manner naked, wearing nothing but a slip of cloth betwixt their legs, each end of which is fastened to a cord or belt they wear round the waist. The Otaheitean cloth, or indeed any sort, was much valued by them.

As harmless and friendly as these people seem to be, they are not without offensive weapons, such as short wooden clubs and spears.

Their houses are low miserable huts, constructed by setting sticks upright in the ground, at six or eight feet distance, then bending them towards each other, and tying them together at the top, forming thereby a kind of Gothic arch. The longest sticks are placed in the middle, and shorter ones each way, and at less distance asunder; by which means the building is highest and broadest in the middle, and lower and narrower towards each end. To these are tied others horizontally, and the whole is thatched over with leaves of sugar-cane. The door-way is in the middle of one side, formed like a porch, and so low and narrow, as just to admit a man to enter upon all fours.

The gigantic statues are not, in Captain Cook's opinion, looked upon as idols by the present inhabitants, whatever they might have been in the days of the Dutch; at least, he saw nothing that could induce him to think so. On the contrary, he rather supposes that they are burying-places for certain tribes or families.

The workmanship is rude, but not bad; nor are the features of the face ill formed, the nose and chin in particular; but the ears are long beyond proportion; and as to the bodies, there is hardly any thing like a human figure about them.

The working-tools of these people are but very mean, and like those of all the other islanders they had visited in this ocean, made of stone, bone, shells, &c.

After leaving Easter Island, they steered north-west-by-north and north-north-west, with a fine easterly gale.

Having now a steady settled trade-wind, and pleasant weather, the forge was ordered to be set up, to repair and make various necessary articles in the iron way; and the caulkers had already been some time at work, caulking the decks, weather-works, &c.

On the 7th of April they saw an isle, which, as it was a new discovery, they named Hood's Island, after the young gentleman who first saw it; the second was that of St. Pedro; the third, La Dominica; and the fourth, St. Christina. They ranged the south-east coast of La Dominica, without seeing the least signs of anchorage. Some canoes put off from these places, and followed them down the coast.

At length having come before the port they were in search of, they anchored in thirty-four fathoms water, and a fine sandy bottom. This was no sooner done, than about thirty or forty of the natives came off in ten or twelve canoes; but it required some address to get them alongside. At last, a hatchet and some spike-nails induced the people in one canoe to come under the quarter-gallery; after which all the others put alongside, and having exchanged some bread-fruit and fish for small nails, &c. retired on shore, the sun being already set. They observed a heap of stones on the bow of each canoe, and every man to have a sling tied round his hand.

Very

Very early next morning, the natives visited them again in much greater numbers than before; bringing with them bread-fruit, plantains, and one pig, all of which they exchanged for nails, &c. But in this traffic they would frequently keep their goods and make no return, till at last the captain was obliged to fire a musquet-ball over one man who had several times served them in this manner; after which they dealt more fairly and soon after several of them came on board. As the captain was going in a boat to look for a more convenient place to moor the ship in, he observed too many of the natives on board, and said to the officers, "You must look well after these people, or they will certainly carry off something or other." He had hardly got into the boat, before he was told they had stolen one of the iron stanchions from the opposite gangway, and were making off with it. He ordered them to fire over the canoe till he could get round in the boat, but not to kill any one. But the natives made too much noise for him to be heard, and the unhappy thief was killed at the third shot. Two others in the same canoe leaped overboard, but got in again just as he came to them. The stanchion they had thrown overboard. One of them, a man grown, fat bailing the blood and water out of the canoe, in a kind of hysteric laugh. The other, a youth about fourteen or fifteen years of age, looked on the deceased with a serious and dejected countenance. They had afterwards reason to believe he was his son.

At this unhappy accident all the natives retired with precipitation. The captain followed them into the bay, and prevailed upon the people in one canoe to come alongside the boat, and receive some nails and other things which he gave them. One would have thought that the natives, by this time, would have been so sensible of the effect of fire arms, as not to have provoked them to fire upon them any more; but the event proved otherwise. For the boat had no sooner left the kedge anchor, than two men in the canoe put off from the shore, took hold of the buoy-rope, and attempted to drag it ashore, little considering what was fast to it. Left, after discovering their mistake, they should take away the buoy, the captain ordered a musquet to be fired at them. The ball fell short, and they took not the least notice of it; but a second having passed over them, they let go the buoy, and made for the shore. This was the last shot they had occasion to fire at any of them, while they lay at this place. It probably had more effect than killing the man, by shewing them that they were not safe at any distance; nevertheless, they would very often be exercising their talent of thieving, which they thought proper to put up with, as their stay was not likely to be long amongst them.

On the 10th, early in the morning, some people from more distant parts came in canoes alongside, and sold them some pigs; so that they had now sufficient to give the crew a fresh meal. They were, in general, so small, that forty or fifty were hardly sufficient for this purpose. After dinner, the captain went on shore and collected eighteen pigs.

Next morning he went down to the same place where he had been the preceding evening; but instead of getting pigs, as he expected, found the scene quite changed. The nails, and other things, they were mad after but the evening before, they now despised; and instead of them wanted they did not know what; so that he was obliged to return with three or four little pigs, which cost more than a dozen did the day before. The reason was, several of the young gentlemen having landed the preceding day, had given away in exchange various articles which the people had not seen before, and which took with them more than nails, or more useful iron tools. But what ruined their market the most was one of them giving for a pig a very large quantity of red feathers he

had got at Amsterdam. Trade being thus stopped, the captain prepared to leave this place, and go where their wants might be effectually relieved; for after having been nineteen weeks at sea, and living all the time on salt diet, they could not but want some refreshments; yet they had not one sick man on board, owing to the great anti-scorbutic articles they had, and to the great attention of the surgeon, who was remarkably careful to apply them in time.

On the 11th, at three o'clock in the afternoon, they weighed. They had now but a light wind, and that very variable, with showers of rain.

The Marquesas, which they had just left, were discovered by Mendana, a Spaniard, and from him obtained the general name they now bear. They are five in number, viz. La Marquesa, St. Pedro, La Dominica, Santa Christina, and Hood's Island, which is the northernmost; La Dominica is the largest. It hath an unequal breadth, and is about seven or sixteen leagues in circuit. It is full of rugged hills, rising in ridges directly from the sea; these ridges are disjoined by deep valleys, which are covered with wood, as are the sides of some of the hills; the aspect is however barren.

The inhabitants of these islands, collectively, are without exception the finest race of people in this sea. For fine shape and regular features, they perhaps surpass all other nations. Nevertheless, the affinity of their language to that spoke in Otaheite and the Society Isles, shew that they are of the same nation. Oedidee could converse with them tolerably well; and it was easy to see that their language was nearly the same.

Their clothing is the same as at Otaheite, and made of the same materials; but they have it not in such plenty; nor is it so good. The men, for the most part, have nothing to cover their nakedness, except the marra, as it is called at Otaheite; which is a piece of cloth passed round the waist and betwixt the legs. This simple dress is quite sufficient for the climate, and answers every purpose modesty requires. The dress of the women is a piece of cloth, wrapped round the loins like a petticoat, which reaches down below the middle of the leg, and a loose mantle over their shoulders.

In the mode of eating, these people are, by no means, so cleanly as the Otaheitans. They are likewise dirty in their cookery. Pork and fowls are dressed in an oven of hot stones, as at Otaheite; but fruits and roots they roast on the fire, and after taking off the skin or skin, put them into a platter or trough with water, out of which both men and dogs eat at the same time. The captain says, he saw them make a batter of fruit and roots, diluted with water, in a vessel that was loaded with dirt, and out of which the dogs had been but that moment eating, without giving it the least washing, or even washing their hands, which were equally dirty; and when he expressed dislike, was laughed at.

Dogs are the only quadrupeds they saw; and cocks and hens the only tame fowls. However, the woods seemed to abound with small birds of a very beautiful plumage, and fine notes; but the fear of alarming the natives, hindered them from shooting so many of them as might otherwise have been done.

With a fine easterly wind they steered south-west, south-west-by-west, and west-by-south, till the 17th, at ten o'clock in the morning, when land was seen bearing west-by-north, which upon a nearer approach, they found to be a string of low islets, connected together by a reef of coral rocks.

As they steered along the coast, the natives appeared in several places, armed with long spears and clubs, and some were got together on one side of the creek. The captain sent ten boats well armed ashore under the command of Lieutenant Cooper, with a view of having some intercourse with them, and to give Mr. Forster an opportunity





tunity of collecting something in his way. "They saw them land without the least opposition. Some little time after, observing forty or fifty natives, all armed, coming towards the boats, they stood close in shore, in order to be ready to support their people in case of an attack. But nothing of this kind happened; and soon after the boats returned aboard, when Mr. Cooper informed the captain that, on his landing, only a few of the natives met him on the beach, but there were many in the skirts of the woods, with spears in their hands. The presents he made them were received with great coolness, which plainly shewed they were unwelcome visitors. They brought aboard five dogs, which seemed to be in plenty there. They saw no fruit but cocoa-nuts, of which they got, by exchange, two dozen. One of the sailors got a dog for a single plantain, which led them to conjecture they had none of this fruit.

This island, which is called by the inhabitants Tiokea, was discovered and visited by Commodore Byron. It has something of an oval shape, and is about ten leagues in circuit.

On the 18th, at day-break, after having spent the night making short boards, they wore down to another isle they had in sight to the westward, which they reached by eight o'clock, and ranged the south-east side at one mile from shore. These must be the same islands to which Commodore Byron gave the name of George's Islands.

It cannot be determined with any degree of certainty whether this groupe of isles be any of those discovered by the Dutch navigators or no; this part of the ocean is so strewed with these low isles, that a navigator cannot proceed with too much caution.

They made the high land of Otaheite on the 21st of April, and at eight o'clock the next morning anchored in Matavia Bay in seven fathoms water. This was no sooner known to the natives than many of them paid them a visit, and expressed not a little joy at seeing them again.

On the 24th, Otoo the King, and several other chiefs, with a train of attendants, paid them a visit, and brought them as presents ten or a dozen large hogs, besides fruits, which made them exceedingly welcome. The captain was advertised of the King's coming, and looked upon it as a good omen. Knowing how much it was his interest to make this man his friend, he met him at the tents, and conducted him and his friends on board, where they staid dinner, after which they were dismissed with suitable presents, and highly pleased with the reception they had met with.

They now found these people were building a great number of large canoes and houses of every kind; people living in spacious habitations, who had not a place to shelter themselves in eight months before; several large hogs about every house; and every other sign of a rising state.

Judging from these favourable circumstances that they should not mend themselves by removing to another island, the captain resolved to make a longer stay, and begin with the repairs of the ship and stores, &c.

In the morning of the 26th, the captain went down to Oparree, accompanied by some of the officers and gentlemen, to pay Otoo a visit. As they drew near they observed a number of large canoes in motion; but were surprised, when they arrived, to see upwards of three hundred ranged in order, for some distance, along the shore, all completely equipped and manned, besides a vast number of armed men upon the shore. So unexpected an armament collected together in their neighbourhood, in the space of one night, gave rise to various conjectures.

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The vessels of war consisted of 160 large double canoes, very well equipped, manned, and armed. The chiefs, and all those on the fighting stages, were dressed in their war-habits; that is, in a vast quantity of cloth, turbans, breast-plates, and helmets. Some of the latter were of such a length as greatly to encumber the wearer. Indeed, their whole dress seemed to be ill calculated for the day of battle, and to be designed more for shew than use. Be this as it may, it certainly added grandeur to the prospect, as they were so complaisant as to shew themselves to the best advantage. The vessels were decorated with flags, streamers, &c. so that the whole made a grand and noble appearance, such as they had never seen before in this sea, and what no one would have expected. Their instruments of war were clubs, spears, and stones. The vessels were ranged close along-side of each other with their heads ashore, and their stern to the sea; the admiral's vessel being nearly in the centre. Besides the vessels of war, there were an hundred and seventy sail of smaller double canoes, all with a little house upon them, and rigged with a mast and sail, which the war canoes had not. These were designed for transports, victuallers, &c. for in the war canoes was no sort of provisions whatever. In these three hundred and thirty vessels there were no less than seven thousand seven hundred and sixty men.

Tupia informed them, when they were first here, that the whole island raised only between six and seven thousand men; but they now saw two districts only raise that number; so that he must have taken his account from some old establishment; else he only meant tatatus, that is warriors, or men trained from their infancy to arms, and did not include the rowers, and those necessary to navigate the other vessels.

While they were viewing this fleet, Tee came and whispered them in the ear, that Otoo was gone to Matavia, advising them to return thither. They accordingly proceeded for the ship.

They had not been long gone from Oparee, before the whole fleet was in motion to the westward, whence it came. When they got to Matavja, they were told that this fleet was part of the armament intended to go against Eimeo, whose chief had thrown off the yoke of Otaheite, and assumed an independency. They were likewise informed that Otoo neither was nor had been at Matavia; so that they were still at a loss to know why he fled from Oparee. This occasioned another trip thither in the afternoon, where they found him, and now understood that the reason of his not seeing them in the morning, was that some of his people having stolen a quantity of their clothes, which were on shore washing, he was afraid the captain should demand restitution. He repeatedly asked him if he was not angry; and when he assured him that he was not, and that they might keep what they had got, he was satisfied.

In the morning of the 27th of April, the captain received a present from Towha, consisting of two large hogs and some fruit, sent by two of his servants, who had orders not to receive any thing in return; nor would they when offered them. Soon after, he went down to Oparree in his boat, where having found both this chief and the King, after a short stay, he brought them both on board to dinner, together with Tarevato, the King's younger brother, and Tee. As soon as they drew near the ship, the admiral, who had never seen one before, began to express much surprize at so new a sight. He was conducted all over the ship, every part of which he viewed with great attention. On this occasion Otoo was the principal shew-man; for, by this time, he was well acquainted with the different parts of the ship. After dinner Towha put a hog on board, and retired, without the captain's knowing any thing of the matter, or having made him any return either for this, or the present he had in the morning.

Soon

Soon after the King and his attendants went away also. Both these chiefs, when on board, solicited him to assist them against Tiarabou, but to their solicitations he gave no encouragement.

On the 28th, one of the natives attempting to steal a water-cask from the watering-place, he was caught in the act, sent on board, and put in irons; in which situation Otoo and the other chiefs saw him. Having made known his crime to them, Otoo begged he might be set at liberty. This the captain refused, telling him, that since he punished his people, when they committed the least offence against the natives, it was but just this man should be punished also; and as he knew he would not do it, he was resolved to do it himself. Accordingly, he ordered the man to be carried on shore to the tents, and having followed, with Otoo, Towha, and others, he ordered the guard out, under arms, and the man to be tied up to a post. Otoo, his sister, and some others begged hard for him; Towha said not one word, but was very attentive to every thing going forward. The captain expostulated with Otoo on the conduct of this man, and of his people in general; telling him, that neither he, nor any of his people, took any thing from them, without first paying for it; enumerating the articles they gave in exchange for such and such things, and urging that it was wrong in them to steal from those who were their friends. He moreover told him, that the punishing this man would be the means of saving the lives of others of his people, by deterring them from committing crimes of this nature. With these and other arguments, which he pretty well understood, he seemed satisfied, and only desired the man might not be murthered (or killed). The captain then ordered the crowd, which was very great, to be kept at a proper distance, and in the presence of them all, ordered the fellow two dozen of lashes with a cat-o'-nine-tails, which he bore with great firmness, and was then set at liberty. After this the natives were going away; but Towha stepped forth, called them back, and harangued them for near half an hour. His speech consisted of short sentences, which were not well understood; but from what they could gather, he recapitulated part of what he had said to Otoo, named several advantages they had received from the captain, condemned their present conduct, and recommended a different one for the future. The gracefulness of his action, and the attention with which he was heard, bespoke him a great orator.

Otoo said not one word. As soon as Towha had ended his speech, the captain ordered the marines to go through their exercise, and to load and fire in volleys with ball: and as they were very quick in their manœuvres, it is easier to conceive than to describe the amazement the natives were under the whole time, especially those who had not seen any thing of the kind before.

This being over, the chiefs took leave and retired with all their attendants, scarcely more pleased than frightened at what they had seen.

They had a very great supply of provisions, sent and brought by different chiefs, on the 1st of May; and the next day received a present from Towha, sent by his servants, consisting of a hog, and a boat-load of various sorts of fruits and roots. The like present they also had from Otoo, brought by Tarevato, who stayed dinner.

On going ashore in the morning of the 7th, they found Otoo at the tents, and took the opportunity to ask his leave to cut down some trees for fuel, which he readily granted. The captain told him he should cut down no trees that bore any fruit. He was pleased with this declaration, and told it aloud several times to the people about them.

During the night, between the 7th and 8th, some time in the middle watch, all their friendly connections received an interruption, through the negligence of one of the

sentinels on shore. He having either slept or quitted his post, gave one of the natives an opportunity to carry off his musquet. The first news the captain heard of it was from Tee, whom Otoo had sent on board for that purpose, and to desire that he would go to him, for that he was mataoued. They were not well enough acquainted with their language to understand all Tee's story; but they understood enough to know that something had happened which had alarmed the King. In order, therefore, to be fully informed, the captain went ashore with Tee and Tarevato, who had slept aboard all night. As soon as they landed, he was informed of the whole by the serjeant who commanded the party. The natives were all alarmed, and the most of them fled. Tee and the captain went to look for Otoo; and as they advanced, he endeavoured to allay the fears of the people, but at the same time insisted on the musquet being restored. After travelling some distance into the country, enquiring of every one they saw for Otoo, Tee stopped all at once, and advised the captain to return, saying, that Otoo was gone to the mountains, and he would proceed and tell him that he (the captain) was still his friend. Tee also promised that he would use his endeavours to recover the musquet.

The captain returned to the ship, and soon after he observed six large canoes coming round Point Venus. Some people whom he had sent out to watch the conduct of the neighbouring inhabitants, informed him, they were laden with baggage, fruit, hogs, &c. There being room for suspecting that some person belonging to these canoes had committed the theft, he came to a resolution to intercept them; and having put off in a boat for that purpose, gave orders for another to follow. One of the canoes, which was some distance ahead of the rest, came directly for the ship. He went along side this, and found two or three women in her whom he knew. They told him they were going on board the ship with something for him; and on inquiring of them for Otoo, was told he was then at the tents. Pleased with this news, he contradicted the orders he had given for intercepting the other canoes, thinking they might be coming on board also as well as this one, which he left within a few yards of the ship, and rowed ashore to speak with Otoo. But when he landed he was told that he had not been there, nor knew they any thing of him. On looking behind him, he saw all the canoes making off in the greatest haste; even the one he had left along side the ship had evaded going on board, and was making her escape. Vexed at being thus outwitted, he resolved to pursue them; and as he passed the ship, gave orders to send another boat for the same purpose. Five out of six they took, and brought along-side; but the first, which acted the finesse so well, got clear off. When they got on board with their prizes, he learnt that the people, who had deceived him, used no endeavours to lay hold of the ship on the side they were upon, but let their canoe drop past, as if they meant to come under the stern, or on the other side; and that the moment they were past, they paddled off with all speed. Thus the canoe, in which were only a few women, was to have amused them with false stories, as they actually did, while the others, in which were most of the effects, got off.

In one of the canoes they had taken, was a chief, a friend of Mr. Forster's, who had hitherto called himself an earee, and would have been much offended if any one had called his title in question; also three women, his wife and daughter, and the mother of the late Touraha. These, together with the canoes, the captain resolved to detain, and to send the chief to Otoo, thinking he would have weight enough with him to obtain the return of the musquet, as his own property was at stake.

In the dusk of the evening it was brought to the tents, together with some other things they had lost, which they knew nothing of, by three men who had pursued the thief, and taken them from him. The captain knew not if they took this trouble of their own accord, or by order of Otoo. He rewarded them, and made no farther inquiry about it.

When the musquet and other things were brought in, every one then present, or who came after, pretended to have had some hand in recovering them, and claimed a reward accordingly. But there was no one acted this farce so well as Nuno, a man of some note, and well known to the captain when he was here in 1769. This man came, with all the savage fury imaginable in his countenance, and a large club in his hand, with which he beat about him, in order to shew how he alone had killed the thief; when, at the same time, they all knew he had not been out of his house the whole time.

Things were now once more restored to their former state; and Otoo promised on his part, that, the next day, they should be supplied with fruit, &c. as usual.

They then returned with him to his proper residence at Oparree, and there took a view of some of his dock-yards (for such they well deserved to be called) and large canoes; some lately built and others building; two of which were the largest they had ever seen in this sea; or indeed any where else, under that name. They now returned to the ship.

Otoo desiring to see some of the great guns fire from the ship, the captain ordered twelve to be shotted and fired toward the sea. As he had never seen a cannon fired before, the sight gave him as much pain as pleasure. In the evening, they entertained him with fire-works, which gave him great satisfaction. Thus ended all their differences.

As the most essential repairs of the ship were nearly finished, it was resolved to leave Otaheite in a few days; the captain accordingly ordered every thing to be got off from the shore, that the natives might see they were about to depart.

On the 12th, old Oberca, the woman who, when the Dolphin was here in 1767, was thought to be Queen of the island, and whom they had not seen since 1769, paid them a visit, and brought a present of hogs and fruit. Soon after, came Otoo with great retinue, and a large quantity of provisions. The captain was pretty liberal in his returns, thinking it might be the last time he should see these good people, who had so liberally relieved their wants; and, in the evening, entertained them with fire-works.

On the 14th they saw a number of war canoes coming round the point of Oparree. Being desirous of having a nearer view of them, accompanied by many officers and gentlemen, they hastened down to Oparree, which they reached before all the canoes were landed, and had an opportunity of seeing in what manner they approached the shore. When they got before the place where they intended to land they formed themselves into divisions, consisting of three or four, or perhaps more, lashed square and close along-side of each other; and then each division, one after the other, paddled in for the shore with all their might, and conducted in so judicious a manner that they formed, and closed a line, along the shore, to an inch. The rowers were encouraged to exert their strength by their leaders on the stages, and directed by a man who stood with a wand in his hand in the fore-part of the middlemost vessel. This man, by words and actions, directed the paddlers when all should paddle, when either the one side or the other should cease, &c. for the steering paddles alone were not sufficient to direct them. All these motions were observed with such quickness as clearly shewed them to be expert in their business. Otoo, who was present, called some of their

wisp of straw, which hung by a string from his middle. They had an opportunity of seeing this acted another time, when it was observed, that the moment they had got hold of the fellow who represented the child, they flatted or pressed his nose. From this they judged, that they do so by their children when born, which may be the reason why all in general have flat noses. This part of the play, from its newness, and the ludicrous manner in which it was performed, gave them, the first time time they saw it, some entertainment, and caused a loud laugh, which might be the reason why they acted it so often afterwards. But this, like all their other pieces, could entertain them no more than once.

Sunday the 29th, they found several articles had been stolen out of the boats which lay near the ship; and the chief not only knew they were stolen, but by whom, and where they were; and he went immediately with the captain in his boat, in pursuit of them. After proceeding a good way along shore, the chief ordered them to land near some houses, where they did not wait long before all the articles were brought to them, except the pinnace's iron tiller, which he was told was still farther off; this was never recovered.

On the 30th, one of the chiefs made the captain a present of two pigs; he invited the donor to dinner, and ordered one of the pigs to be killed and dressed, and attended himself to the first part of the operation, which was as follows: They strangled the hog, which was done by three men; the hog being placed on his back, two of them laid a pretty strong stick across his throat, and pressed with all their weight on each end; the third man held his hind legs, kept him on his back, and plugged up his fundament with grass, to prevent any air from passing or repassing that way. In this manner they held him for about ten minutes before he was quite dead. The hog weighed about fifty pounds. It was baked in their usual manner. Some parts about the ribs were thought overdone, but the more fleshy parts were excellent; and the skin, which by the European way of dressing can hardly be eaten, had, by this method, an excellent flavour.

The people knowing that they should sail soon, began on the 31st to bring on board fruit more than usual. Amongst those who came was a young man who measured six feet four inches and six-tenths; and his sister, younger than him, measured five feet ten inches and a half. A brisk trade for hogs and fruit continued till the 3d of June.

The captain fixed on the next day, June 4th, for sailing, when Oreo, the chief, and his whole family, came on board, to take their last farewell, accompanied by Oo-oo-rou, the caree de Hi, and Boba the caree of Otaha, and several of their friends. None came empty; but Oo-oo-rou brought a pretty large present, this being his first and only visit. The captain distributed amongst them almost every thing he had left. The very hospitable manner in which he had ever been received by these people, had endeared them to him, and given them a just title to every thing in his power to grant.

Oree pressed him to return; when the captain declined making any promises on that head, he asked the name of his morai (burying-place). As strange a question as this was, he hesitated not a moment to tell him Stepney: the parish in which he lived when in London. He was requested to repeat it several times over till they could pronounce it; then, "Stepney marai no toote" was echoed through an hundred mouths at once. What greater proof could they have of these people esteeming them as friends, than their wishing to remember them even beyond the period of their lives? They had been repeatedly told that they should see them no more; they then wanted to know where they were to mingle with their parent dust.

As

As they could not promise, or even suppose, that more English ships would be sent to those isles, their faithful companion Oedidee chose to remain in his native country. But he left the ship with a regret fully demonstrative of the esteem he had for them. Indeed, he would have been a better specimen of the nation, in every respect, than Omai. Just as Oedidee was going out of the ship, he asked the captain to tatou some parou for him, in order to shew the commanders of other ships which might stop here. He complied with his request, gave him a certificate of the time he had been with them, and recommended him to the notice of those who might touch at the island after them.

They did not get clear of their friends till eleven o'clock, when they weighed and put to sea; but Oedidee did not leave them till they were almost out of the harbour. He staid, in order to fire some guns; for it being His Majesty's birth-day, they fired the salute at going away.

Nature is exceedingly kind to these islands. The natives, copying the bounty of nature, are equally liberal, contributing plentifully and cheerfully to the wants of navigators. During their stay they had plenty of pork and variety of fruit. All these articles were got in exchange for axes, hatchets, nails, chissels, cloth, red feathers, beads, knives, scissars, looking-glasses, &c. articles which will ever be valuable here. Shirts are a very capital article in making presents, especially with those who have any connection with the fair sex. A shirt here is full as necessary as a piece of gold in England. The ladies at Otaheite, after they had pretty well stripped their lovers of shirts, found a method of clothing themselves with their own cloth. It was their custom to go on shore every morning, and to return on board in the evening, generally clad in rags. This furnished a pretence to importune the lover for better clothes; and when he had no more of his own, he was to dress them in new cloth of the country, which they always left ashore; and appearing again in rags, they must again be clothed. So that the same suit might pass through twenty different hands, and be as often sold, bought, and given away.

On the 6th, being the day after leaving Ulietea, they saw Howe Island, discovered by Captain Wallis. The inhabitants of Ulietea speak of an uninhabited island, about this situation, called by them Mopeha, to which they go at certain seasons for turtle; perhaps this may be the same.

On the 16th, just after sun-rise, land was seen from the top-mast head, bearing north-north-east. They immediately altered their course, and steering for it, found it to be another island, composed of five or six woody islets, connected together by sand-banks and breakers, inclosing a lake, into which they could see no entrance. The captain looked upon it as a new discovery, and named it Palmerston Island, in honour of Lord Palmerston, one of the lords of the Admiralty.

At four o'clock in the afternoon they left this isle, and resumed their course to the west by south with a fine steady gale easterly.

On the 20th, they saw land; and as they drew nearer, found it to be an island of considerable extent. Perceiving some people on the shore, and landing seeming to be easy, they brought to, and hoisted out two boats, with which they put off to the land accompanied by some of the officers and gentlemen.

Friendly signs were made to them, which they answered by menaces. All endeavours to bring them to a parley, were to no purpose; for they came with the ferocity of wild boars, and threw their darts. Two or three musquets, discharged in the air, did not hinder one of them from advancing still farther, and throwing another dart, or rather a spear, which passed close over the captain's shoulder. His courage would have cost him











sent him limping off. The natives being now convinced that he was in earnest, all fled; but on calling to them, many returned; and presently after, the other musquet was brought, and laid down at his feet. That moment he ordered the canoes to be restored, to shew them on what account they were detained.

On returning to go on board, he found a good many people collected together, from whom they understood that the man he had fired at was dead. This story he treated as improbable, and addressed a man, who seemed of some consequence, for the restitution of a cooper's adze they had lost in the morning. He immediately sent away two men, as he thought, for it; but he soon found they had greatly mistaken each other; for instead of the adze, they brought the wounded man, stretched out on a board, and laid him down by him, to all appearance dead. He was much moved at the sight; but soon saw his mistake, and that he was only wounded in the hand and thigh. He therefore desired he might be carried out of the fun, and sent for the surgeon to dress his wounds. In the mean time, he addressed several people for the adze, for he was determined to have it. The one he applied most to, was an elderly woman, who had always a great deal to say to him from his first landing; but on this occasion she gave her tongue full scope. The captain understood but little of her eloquence; all he could gather from her arguments was, that it was mean in him to insist on the return of so trifling a thing. But when she found he was determined, she and three or four more women went away; and soon after the adze was brought to him, but he saw her no more. This he was sorry for, as he wished to make her a present, in return for the part she had taken in all their transactions, private as well as public; for he no sooner returned from the pond, the first time he landed, than this old lady presented to him a girl, giving him to understand she was at his service. Miss, who probably had received her instructions, wanted, as a preliminary article, a spike-nail, or a shirt, neither of which he had to give her, and soon made them sensible of his poverty. He thought, by that means, to have come off with flying colours; but he was mistaken; for they gave him to understand he might retire with her on credit. On declining this proposal, the old lady began to argue with him, and then abuse him. Though he comprehended little of what she said, her actions were expressive enough, and shewed that her words were to this effect, sneering in his face, saying, what sort of a man are you, thus to refuse the embraces of so fine a young woman? For the girl certainly did not want beauty.

As soon as the surgeon got ashore, he dressed the man's wounds, and bled him; and was of opinion that he was in no sort of danger, as the shot had done little more than penetrate the skin.

On the 28th they prepared every thing in readiness to sail.

On the 30th they saw the summit of Amattasoa, but not clear enough to determine with certainty whether there was a volcano or no; but every thing they could see concurred to make them believe there was.

Anamocka, or Rotterdam, the island they had just left, was first discovered by Tasman, and by him named Rotterdam. It is of a triangular form, each side is about three and a half or four miles. Round it lie scattered a number of small isles, sandbanks, and breakers. They could see no end to their extent to the north; and it is not impossible that they reach as far south as Amsterdam, or Tongatabu. These, together with Middleburg or Baoowee, and Pylstart, make a group, containing about three degrees of latitude and two of longitude, which Captain Cook named the Friendly Isles or Archipelago, as a firm alliance and friendship seem to subsist

among the inhabitants, and their courteous behaviour to strangers intitles them to that appellation.

The inhabitants, productions, &c. of Rotterdam, and the neighbouring isles, are the same as at Amsterdam. There is, however, far more waste-land on this isle, in proportion to its size, than upon the other, and the people seem to be much poorer; that is, in cloth, matting, ornaments, &c. which constitute a great part of the riches of the South Sea islanders.

They did not distinguish any king, or leading chief, or any person who took upon him the appearance of supreme authority.

As the captain intended to get to the south, in order to explore the land which might lie there, they continued to ply between the isle of Lepers and Aurora; and on the 19th at noon, the last mentioned isle bore South, distant twenty miles.

At day-break on the 21st, they found themselves before the channel that divides Whitsuntide Island from the South Land, which is above two leagues over. Having sent two armed boats to sound, and look for anchorage, on their making the signal for the latter, they sailed in, and anchored in eleven fathoms water.

Next morning early a good many of the natives came round them, some in canoes, and others swimming. The captain soon prevailed on one to come on board; which he no sooner did, than he was followed by more than he desired; so that not only the deck, but rigging, was presently filled with them. He took four into the cabin and gave them various articles, which they shewed to those in the canoes, and seemed much pleased with their reception. While he was thus making friends with those in the cabin, an accident happened that threw all into confusion, but in the end proved advantageous. A fellow in a canoe having been refused admittance into one of the boats that lay along-aside, bent his bow to shoot a poisoned arrow at the boat-keeper. Some of his countrymen prevented his doing it that instant, and gave time to acquaint the captain with it. He ran instantly on deck, and saw another man struggling with him; one of those who had been in the cabin, and had leaped out of the window for this purpose. The other seemed resolved, shook him off, and directed his bow again to the boat-keeper; but, on the captain calling to him, pointed it at him. Having a musquet in his hand loaded with small shot, he gave him the contents. This staggered him for a moment, but did not prevent him from holding his bow still in the attitude of shooting. Another discharge of the same nature made him drop it, and the others, who were in the canoe, to paddle off with all speed. At this time, some began to shoot arrows on the other side. A musquet discharged in the air had no effect; but a four-pound shot over their heads, sent them off in the utmost confusion. Many quitted their canoes and swam on shore: those in the great cabin leaped out of the windows; and those who were on the deck, and on different parts of the rigging, all leaped overboard. After this they took no further notice of them, but suffered them to come off and pick up their canoes; and some even ventured again alongside the ship.

These people set no value on nails, or any sort of iron tools; nor indeed on any thing they had. They would now and then exchange an arrow for a piece of cloth; but very seldom would part with a bow.

Being unwilling to lose the benefit of the moon-light nights, which now happened, at seven A. M. on the 23d of July, they weighed, and proceeded out of the harbour.

When the natives saw them under sail, they came off in their canoes, making excuses with more confidence than before, and giving such extraordinary proofs of their honesty as surprized them. As the ship, at first, had fresh way through the water, several

Several of them stopped after they had received goods, and before they had time to deliver theirs in return. Instead of taking advantage of this, they used their utmost efforts to get up with them, and to deliver what they had already been paid for. One man, in particular, followed them a considerable time, and did not reach them till it was calm, and the thing was forgotten. As soon as he came alongside, he held up the thing which several were ready to buy; but he refused to part with it, till he saw the person to whom he had before sold it, and to him he gave it. The person, not knowing him again, offered him something in return; which he refused, and shewed him what he had given him before. Pieces of cloth, and marble paper, were in most esteem with them; but edge-tools, nails, and beads they seemed to disregard.

By this time they might be satisfied they meant them no harm; so that had they made a longer stay, they might soon have been upon good terms with this ape-like nation. For, in general, they were the most ugly, ill-proportioned people they ever saw, and in every respect different from any they had met with in this sea. They are a very dark-coloured and rather diminutive race, with long heads, flat faces, and monkey countenances. Their hair mostly black or brown, is short and curly; but not quite so soft and woolly as that of a negroe. Their beards are very strong, crisp, and bushy, and generally black and short. But what most adds to their deformity, is a belt or cord which they wear round the waist, and tie so tight over the belly, that the shape of their bodies is not unlike that of an over-grown pismire. The men go quite naked, except a piece of cloth or leaf used as a wrapper.

They saw but few women, and they were not less ugly than the men; their heads, faces, and shoulders are painted red; they wear a kind of petticoat; and some of them had something over their shoulders like a bag, in which they carry their children. None of them came off to the ship, and they generally kept at a distance when the ship's people were on shore. Their ornaments are ear-rings made of tortoise-shell, and bracelets. A curious one of the latter, four or five inches broad, wrought with thread or cord, and studded with shells, is worn by them just above the elbow. Round the right wrist they wear hogs tusks, bent circular, and rings made of shells; and round their left a round piece of wood, which they judged was to ward off the bow-string. The bridge of the nose is pierced, in which they wear a piece of white stone, about an inch and a half long, formed like a bow. As signs of friendship they present a green branch, and sprinkle water with the hand over the head.

Their weapons are clubs, spears, and bows and arrows. The two former are made of hard or iron-wood. Their bows are about four feet long, made of a stick split down the middle, and are not circular, but bent more at one end than the other. The arrows, which are a sort of reeds, are sometimes armed with a long sharp point, made of hard wood, and sometimes with a very hard point made of bone; and these points are all covered with a substance which they took for poison. Indeed the people themselves confirmed their suspicions, by making signs to them not to touch the point, and giving them to understand, that if they were pricked by them they would die. They are very careful of them, and keep them always wrapped up in a quiver. Some of these arrows are armed with two or three points, each with small prickles on the edges, to prevent the arrows being drawn out of the wound.

The people of Mallicollo seemed to be a quite different nation from any they had met with, and speak a different language. Of about eighty words, which Mr. Forster collected, hardly one bears any affinity to the language spoken at any other island or place they had ever been at. The letter R is used in many of their words; and frequently two or three being joined together, such words were found difficult to

nounce. The captain observed that they could pronounce most of the English words with great ease. They express their admiration by hissing like a goose.

To judge of the country by the little they saw of it, it must be fertile; but their fruits are not so good as those of the Society or Friendly Isles. They left them a dog and a bitch; and there is no doubt they will be taken care of, as they were very fond of them.

After they had got to sea, they tried what effect one of the poisoned arrows would have on a dog. Indeed they had tried it in the harbour the very first night, but they thought the operation had been too slight, as it had no effect. The surgeon now made a deep incision in the dog's thigh, into which he laid a large portion of the poison, just as it was scraped from the arrows, and then bound up the wound with a bandage. For several days after they thought the dog was not so well as he had been before; but whether this was really so, or only suggested by imagination, is uncertain. He was afterwards as if nothing had been done to him, and lived to be brought home to England. However, there is no doubt of this stuff being of a poisonous quality, as it could answer no other purpose. The people seemed not unacquainted with the nature of poison; for when they brought them water on shore, they first tasted it, and then gave them to understand they might with safety drink it.

This harbour, which is situated on the north-east side of Mallicollo, the captain named Port Sandwich; and it is so sheltered that no winds can disturb a ship at anchor there. Another great advantage is, you can lie so near the shore, as to cover your people, who may be at work upon it.

Soon after they got to sea, they stood over for Ambrym. On the 24th they reached an island near Apee, about four leagues in circuit; it is remarkable by having three high peaked hills upon it, by which it has obtained that name. They now steered to the east; and having weathered Threchills, stood for a groupe of small isles which lie off the south-east point of Apee. These were called Shepherd's Isles, in honour of Dr. Shepherd, Plumian Professor of Astronomy at Cambridge.

The night before they came out of Port Sandwich, two reddish fish, about the size of a large bream, and not unlike them, were caught with hook and line. On these fish most of the officers, and some of the petty-officers, dined the next day. The night following, every one who had eaten of them was seized with violent pains in the head and bones, attended with a scorching heat all over the skin, and numbness in the joints. There remained no doubt that this was occasioned by the fish being of a poisonous nature, and having communicated its bad effects to all who partook of of them; even to the hogs and dogs. One of the former died about sixteen hours after; it was not long before one of the latter shared the same fate; and it was a week or ten days before all the gentlemen recovered. These must have been the same sort of fish mentioned by Quiros, under the name of Pargos, which poisoned the crews of his ships, so that it was some time before they recovered; and they would doubtless have been in the same situation, had more of them been eaten.

Continuing their course to the south, at five P. M. drew near the southern lands, which they found to consist of one large island, whose southern and western extremities extended beyond their sight, and three or four smaller ones lying off its north side. The two northernmost are much the largest, have a good height, and lie in the direction of east-by-south, and west-by-north from each other, distant two leagues. They named the one Montague, and the other Hinchinbrook, and the large island

As they passed Hinchinbrook Isle, several people came down to the sea-side, and by signs seemed to invite them ashore. Some were also seen on Sandwich Island, which exhibited a most delightful prospect, being spotted with woods and lawns, agreeably diversified over the whole surface. It hath a gentle slope from the hills, which are of a moderate height, down to the sea-coast. This is low, and guarded by a chain of breakers, so that there is no approaching it at this part.

On the 3d of August, they found themselves abreast a lofty promontory; and on the 4th, at day-break, the captain went with two boats to examine the coast, to look for a proper landing-place, wood and water. At this time the natives began to assemble on the shore, and by signs invited them to land. The captain went first to a small beach, which is towards the head, where he found no good landing. Some of the natives who were there, offered to haul the boats over the breakers to the sandy beach, which was thought a friendly offer, but they had reason afterwards to alter their opinion. When they found they would not do as they desired, they made signs for them to go down into a bay, which they accordingly did, and they ran along shore abreast of them, their number increasingly prodigiously. They put in to the shore in two or three places, but not liking the situation, did not land. By this time the natives conceived what they wanted, as they directed the boat round a rocky point, where, on a fine sandy beach, the captain stepped out of the boat without wetting a foot, in the face of a vast multitude, with only a green branch in his hand. He took but one man out of the boat with him, and ordered the other boat to lie to a little distance off. They received him with great courtesy and politeness; and would retire back from the boat on his making the least motion with his hand. A man, whom he took to be a chief, seeing this, made them form a semicircle round the boat's bow, and beat such as attempted to break through this order. This man he loaded with presents, giving likewise to others, and asked by signs for fresh water, in hopes of seeing where they got it. The chief immediately sent a man for some, who ran to a house, and presently returned with a little in a bamboo; so that he gained but little information by this. He next asked, by the same means, for something to eat; and they as readily brought him a yam and some cocoa-nuts. In short, he was charmed with their behaviour; and the only thing which could give the least suspicion was, that most of them were armed with clubs, spears, darts, bows, and arrows. For this reason the captain kept his eye continually upon the chief, and watched his looks as well as his actions. He made many signs to haul the boat upon the shore, and at last slipped into the crowd, where he observed him speak to several people, and then return, repeating signs to haul the boat up, and hesitating a good deal before he would receive some spike-nails which were then offered him. This made him suspect something was intended, and immediately he stepped into the boat, telling them by signs that he should soon return. But they were not for parting so soon, and now attempted by force, what they could not obtain by gentler means. The gang-board happened unluckily to be laid out for the captain to come into the boat. Unluckily, for if it had not been out, and if the crew had been a little quicker in getting the boat off, the natives might not have had time to put their design in execution, nor would the following disagreeable scene have happened. As they were putting off the boat, they laid hold of the gang-board, and unhooked it off the boat's stern; but as they did not take it away, it was thought this had been done by accident, and he ordered the boat in again to take it up. Then the natives hooked it over the boat's stern, and attempted to haul her ashore; others, at the same time, snatched the oars out of the people's hands. On pointing a musket at them, they in some measure desisted, but returned in an instant, seemingly deter-



ained to haul the boat ashore. At the head of this party was the chief; the others, who could not come at the boat, stood behind with darts, stones, and bows and arrows in hand, ready to support them. Sights and threats having no effect, their own safety became the only consideration; and yet the captain was unwilling to fire on the multitude, and resolved to make the chief alone fall a victim to his own treachery; but his musquet at this critical moment missed fire. Whatever idea they might have formed of their arms, the natives must now have looked upon them as childish weapons, and began to let them see how much better theirs were, by throwing stones and darts, and by shooting arrows. This made it absolutely necessary to give orders to fire. The first discharge threw them into confusion; but a second was hardly sufficient to drive them off the beach; and after all, they continued to throw stones from behind the trees and bushes, and every now and then to pop out and throw a dart. Four lay to all appearance dead on the shore; but two of them afterwards crawled into the bushes. Happy it was for these people, that not half their musquets would go off, otherwise many more must have fallen. One sailor was wounded in the cheek with a dart, the point of which was as thick as a little finger, and yet it entered above two inches; which shews that it must have come with great force, though indeed they were very near them. An arrow struck Mr. Gilbert's naked breast, who was above thirty yards off; but probably it had struck something before; for it hardly penetrated the skin. The arrows were pointed with hard wood.

As soon as they got on board, the captain ordered the anchor to be weighed. While this was doing, several people appeared on the low rocky point, displaying two oars they had lost in the scuffle. This was supposed a sign of submission, and of their wanting to give them the oars. He, nevertheless, fired a four-pound shot at them, to let them see the effect of their great guns. The ball fell short, but frightened them so much, that none were seen afterwards; and they left the oars standing up against the bushes. They now stood out to sea.

These islanders seemed to be a different race from those of Mallicollo, and spoke a different language. They are of the middle size, have a good shape, and tolerable features. Their colour is very dark, and they paint their faces, some with black, and others with red pigment. Their hair is very curly and crisp, and somewhat woolly. They saw a few women, and thought them ugly; they wore a kind of petticoat made of palm leaves, or some plant like it. But the men, like those of Mallicollo, were in a manner naked; having only the belt about the waist, and the piece of cloth, or leaf, used as a wrapper. They saw no canoes with these people, nor were any seen in any part of this island. They live in houses covered with thatch, and their plantations are laid out by line, and fenced round.

In the night of the 5th of August they saw a light, which was occasioned by a volcano, which they observed to throw up vast quantities of fire and smoke, with a rumbling noise heard at a great distance. They now made sail for the island whence it appeared, and presently after discovered a small inlet which had the appearance of being a good harbour. The wind left them as soon as they were within the entrance, and obliged them to drop an anchor in four fathoms water. After this, the boats were sent to found.

Many of the natives now got together in parties, on several parts of the shore, all armed with bows, spears, &c. Some swam off to them, others came in canoes. At first they were shy, and kept at the distance of a stone's throw; they grew insensibly bolder, and at last came under their stern, and made some exchanges. The people in one of the first canoes, after coming as near as they durst, threw towards them some  
cocoa-

cocoa-nuts. The captain went into a boat and picked them up, giving them in return some cloth and other articles. This induced others to come under the stern and alongside, where their behaviour was insolent and daring. They wanted to carry off every thing within their reach; they got hold of the fly of the ensign, and would have torn it from the staff; others attempted to knock the rings off the rudder; but the greatest trouble they gave them was to look after the buoys of their anchors, which were no sooner thrown out of the boats, or let go from the ship, than they got hold of them. A few musquets fired in the air had no effect; but a four-pounder frightened them so much, that they quitted their canoes that instant, and took to the water. But as soon as they found themselves unhurt, they got again into their canoes, gave them some halloos, flourished their weapons, and returned once more to the buoys. This put them to the expence of a few musquetoon ball, which had the desired effect. Although none were shot, they were afterwards afraid to come near the buoys; very soon all retired on shore, and they were permitted to sit down to dinner undisturbed.

Towards the evening, after the ship was moored, the captain landed at the head of the harbour, in the south-east corner, with a strong party of men, without any opposition being made by a great number of the natives who were assembled in two parties, the one on the right, the other on the left, armed with clubs, darts, spears, slings and stones, bows and arrows, &c. After distributing to the old people (for they could distinguish no chief), and some others, presents of cloth, medals, &c. he ordered two casks to be filled with water out of a pond, about twenty paces behind the landing-place, giving the natives to understand that this was one of the articles they wanted. Besides water, they got from them a few cocoa-nuts, which seemed to be in plenty on the trees; but they could not be prevailed upon to part with any of their weapons. These they held in constant readiness, and in the proper attitudes of offence and defence, so that little was wanting to make them attack them; at least they thought so, by their pressing so much upon them, and in spite of their endeavours to keep them off. Their early re-embarking probably disconcerted their scheme, and after that they all retired.

As they wanted to take in a large quantity both of wood and water, and as when he was on shore he had found it practicable to lay the ship much nearer the landing-place than she now was, which would greatly facilitate that work, as well as over-awe the natives, and enable them better to cover and protect the working party on shore; with this view, on the 6th, they endeavoured to transport the ship to the place the captain designed to moor her in. While they were about this, they observed the natives assembling from all parts, and forming themselves into two parties, as they did the preceding evening, one on each side the landing-place, to the amount of some thousands, armed as before. A canoe, sometimes conducted by one, and at other times by two or three men, now and then came off, bringing a few cocoa-nuts or plantains. The captain made an old man, who seemed well-disposed, understand, by signs, that they were to lay aside their weapons, took those which were in the canoe and threw them overboard, and made him a present of a large piece of cloth. There was no doubt that he understood him, and made his request known to his countrymen; for as soon as he landed, they observed him go first to the one party, and then to the other; nor was he ever after seen with any thing like a weapon in his hand. After this, three fellows came in a canoe under the stern, one of them brandishing a club, with which he struck the ship's side, and committed other acts of defiance, but at last offered to exchange it for a string of beads, and some other trifles. These were sent down.

down to him by a line; but the moment they were in his possession, he and his companions paddled off in all haste, without giving the club or any thing else in return. This was what the captain expected, and indeed what he was not sorry for, as he wanted an opportunity to shew the multitude on shore the effect of their fire-arms without materially hurting any of them. Having a fowling-piece loaded with small shot (No. 3.) he gave the fellow the contents; and when they were above musket-shot off, he ordered some of the muskettoons, or wall-pieces, to be fired, which made them leap out of the canoe, keep under her off-side, and swim with her ashore. This transaction seemed to make little or no impression on the people there; on the contrary, they began to halloo, and to make sport of it.

After mooring the ship, by four anchors, with her broadside to the landing-place, hardly musket-shot off, and placing the artillery in such a manner as to command the whole harbour, he embarked with the marines, and a party of seamen, in three boats, and rowed in for the shore. It hath been already mentioned, that the two divisions of the natives were drawn up on each side the landing-place. They had left a space between them of about thirty or forty yards, in which were laid, to the most advantage, a few small bunches of plantains, a yam, and two or three roots. Between these and the water were stuck upright in the sand, for what purpose they never could learn, four small reeds, about two feet from each other, in a line at right angles to the shore, where they remained for two or three days after. The old man before mentioned, and two more, stood by these things, inviting them by signs to land; but the former trap was still in their memory, which they were so near being caught in at the last island; and this looked something like it. In short, every thing conspired to make them believe they meant to attack them as soon as they should be on shore; the consequence of which was easily supposed: many of them must have been killed and wounded, and they should hardly have escaped unhurt; two things the captain equally wished to prevent. He ordered a musquet to be fired over the party on the right, which was by far the strongest body; but the alarm it gave them was momentary. In an instant they recovered themselves, and began to display their weapons. One fellow shewed them his backside, in a manner which plainly conveyed his meaning. After this, he ordered three or four more musquets to be fired. This was the signal for the ship to fire a few great guns, which presently dispersed them; and then they landed, and marked out the limits, on the right and left, by a line. The old man before mentioned stood his ground, though deserted by his two companions, and the captain rewarded him. The natives came gradually to them, seemingly in a more friendly manner; some even without their weapons, but by far the greatest part brought them; and when they made signs to lay them down, they gave the English to understand that they must lay down theirs first: thus all parties stood armed. They indeed climbed the cocoa-nut trees, and threw down the nuts without requiring any thing for them; but the captain took care that they should always have something in return. He observed that many were afraid to touch what belonged to them; and they seemed to have no notion of exchanging one thing for another. The captain took the old man (whose name was now found to be Paowang) to the woods, and made him understand he wanted to cut down some trees to take on board the ship; cutting down some at the same time, which they put into one of the boats, together with a few small casks of water, with a view of letting the people see what it was they chiefly wanted. Paowang very readily gave his consent to cut wood; nor was there any one who made the least objection. Having landed again, they loaded the launch with water, and after making three hauls with the seine, caught upwards of three hundred

hundred pounds of mullet and other fish. It was some time before any of the natives appeared, and not above twenty or thirty at last, amongst whom was their trusty friend Paowang, who made them a present of a small pig, which was the only one they got at this isle, or that was offered them.

During the night, the volcano, which was about four miles to the west, vomited up vast quantities of fire and smoke, as it had also done the night before; and the flames were seen to rise above the hill which lay between them and it. At every eruption, it made a long rumbling noise like that of thunder, or the blowing up of large mines. A heavy shower of rain, which fell at this time, seemed to increase it; and the wind blowing from the same quarter, the air was loaded with its ashes, which fell so thick that every thing was covered with the dust. It was a kind of fine sand, or stone, ground or burnt to powder, and was exceedingly troublesome to the eyes.

Early in the morning of the 7th, the natives began again to assemble near the watering-place, armed as usual, but not in such numbers as at first. After breakfast they landed, in order to cut wood and fill water. They found many of the islanders much inclined to be friends, especially the old people; on the other hand, most of the younger were daring and insolent, and obliged them to keep to their arms. The captain staid till he saw no disturbance was like to happen, and then returned to the ship, leaving the party under the command of Lieutenants Clerke and Edgcumbe. When they came on-board to dinner, they informed him, that the people continued to behave in the same inconsistent manner as in the morning; but more especially one man, whom Mr. Edgcumbe was obliged to fire at, and believed he had struck with a swan-shot. After that the others behaved with more discretion.

On the 9th Mr. Forster learnt from the people the proper name of the island, which they call Tanna. They gave them to understand, in a manner which they thought admitted of no doubt, that they eat human flesh, and that circumcision was practised among them. They began the subject of eating of human flesh, of their own accord, by asking them if they did. One of the men employed in taking in ballast scalded his fingers in removing a stone out of some water. This circumstance produced the discovery of several hot springs, at the foot of the cliff, and rather below high-water mark.

During the night of the 10th, also all the 11th, the volcano was exceedingly troublesome, and made a terrible noise, throwing up prodigious columns of fire and smoke at each explosion, which happened every three or four minutes; and, at one time, great stones were seen high in the air. Mr. Forster and his party went up the hill on the west side of the harbour, where he found three places whence smoke of a sulphureous smell issued through cracks or fissures in the earth. The ground about these was exceedingly hot, and parched or burnt, and they seemed to keep pace with the volcano; for, at every explosion of the latter, the quantity of smoke or steam in these was greatly increased, and forced out so as to rise in small columns, which they saw from the ship, and had taken for common fires made by the natives. At the foot of this hill are the hot springs before mentioned.

In the afternoon Mr. Forster having began his botanical researches on the other side of the harbour, fell in with Paowang's house, where he saw most of the articles the captain had given him, hanging on the adjoining trees and bushes, as if they were not worthy of being under his roof.

Several other parts of the hill emitted smoke or steam all the day, and the volcano was usually furious, insomuch that the air was loaded with its ashes. The rain which

fell at this time was a compound of water, sand, and earth; so that it properly might be called showers of mire. Whichever way the wind was, they were annoyed by the ashes, unless it blew very strong indeed from the opposite direction. Notwithstanding the natives seemed well enough satisfied with the few expeditions they had made in the neighbourhood, they were unwilling they should extend them farther. As a proof of this, some undertook to guide the gentlemen when they were in the country, to a place where they might see the mouth of the volcano. They very readily embraced the offer; and were conducted down to the harbour before they perceived the cheat.

The 13th, wind at north-east, gloomy weather. The only thing worthy of note this day, was, that Paowang being at dinner with them on board, they took the opportunity to shew him several parts of the ship, and various articles, in hopes of finding out something which he might value, and be induced to take in exchange for refreshments; for what they had got of this kind was trifling. But he looked on every thing that was shewn him with the utmost indifference; nor did he take notice of any thing except a wooden sand-box, which he seemed to admire, and turned two or three times over in his hand.

Next morning after breakfast, a party of them set out for the country, to try if they could not get a nearer and better view of the volcano. The place affected by the heat was not above eight or ten yards square; and near it were some fig-trees, which spread their branches over a part of it, and seemed to like their situation. It was thought that this extraordinary heat was caused by the steam of boiling water strongly impregnated with sulphur. They proceeded up the hill through a country so covered with trees, shrubs, and plants, that the bread-fruit and cocoa-nut trees, which seem to have been planted here by nature, were in a manner choaked up. Here and there they met with a house, some few people, and plantations. These latter they found in different states; some of long standing; others lately cleared; and some only clearing, and before any thing had been planted.—Happening to turn out of the common path, they came into a plantation where they found a man at work, who, either out of good nature, or to get them the sooner out of his territories, undertook to be their guide. They followed him accordingly; but had not gone far before they came to the junction of two roads, in one of which stood another man with a sling and a stone, which he thought proper to lay down when a musquet was pointed at him. The attitude in which they found him, the ferocity appearing in his looks, and his behaviour after, convinced them that he meant to defend the path he stood in. He, in some measure, gained his point; for the guide took the other road, and they followed, but not without suspecting he was leading them out of the common way. The other man went with them likewise, counting them several times over, and hallooing, as they judged, for assistance; for they were presently joined by two or three more, among whom was a young woman with a club in her hand. By these people they were conducted to the brow of a hill, and shewn a road leading down to the harbour, which they wanted them to take. Not choosing to comply, they returned to that they had left, which they pursued alone, their guide refusing to go with them. After ascending another ridge, as thickly covered with wood as those they had come over, they saw yet other hills between them and the volcano, which seemed as far off as at their first setting out. This discouraged them from proceeding farther, especially as they could get no one to be their guide. They therefore came to a resolution to return; and had but just put this in execution when they met between twenty and thirty people, whom

whom the fellow before mentioned had collected together, with a design, no doubt, to oppose their advancing into the country.

Before this excursion some were of opinion, that these people were addicted to an unnatural passion, because they had endeavoured to entice some of the men into the woods; and in particular, one who had the care of Mr. Forster's plant bag, had been once or twice attempted. As the carrying of bundles, &c. is the office of the women in this country, it had occurred to the captain, and he was not singular in this, that the natives might mistake him, and some others, for women. This conjecture was fully verified this day. For this man, who was one of the party, and carried the bag as usual, following the captain down the hill, by the words which he understood of the conversation of the natives, and by their actions, he was well assured that they considered him as a female; till, by some means, they discovered their mistake, on which they cried out Erramange! Erramange! 'Tis a man! 'tis a man! The thing was so palpable that every one was obliged to acknowledge that they had before mistaken his sex; and that, after they were undeceived, they seemed not to have the least notion of what they had suspected. This circumstance will shew how common it is to form wrong conjectures of things, among people whose language is not understood. Had it not been for this discovery, no doubt these people would have been charged with this vile custom.

In the evening Captain Cook took a walk with some of the gentlemen, into the country on the other side of the harbour, where they had very different treatment from what they had met with in the morning. The people they now visited, among whom was their friend Paowang, being better acquainted with them, shewed a readiness to oblige them in every thing in their power. They came to a village; it consisted of about twenty houses, the most of which need no other description than comparing them to the roof of a thatched house in England, taken off the walls and placed on the ground.—Some were open at both ends; others partly closed with reeds; and all were covered with palm thatch. A few of them were thirty or forty feet long, and fourteen or sixteen broad. This part of the island was well cultivated, open, and airy; the plantations were laid out by line, abounding with plaintains, sugar-canes, yams, and other roots, and stocked with fruit-trees.

On the 15th, having finished wooding and watering, a few hands only were on shore making brooms, the rest being employed on board, setting up the rigging, and putting the ship in a condition for sea. Mr. Forster, in his botanical excursions, shot a pigeon, in the claw of which was a wild nutmeg. He took some pains to find the tree, but his endeavours were without success.

On the 17th, the captain went ashore to pay a visit to an old chief, who was said to be King of the island.—Paowang took little or no notice of him; the captain made him a present, after which he immediately went away, as if he had got all he came for. His name was Geogy, and they gave him the title of Areeke. He was very old, but had a merry open countenance. He wore round his waist a broad red and white chequered belt, the materials and manufacture of which seemed the same as that of Otaheite cloth; but this was hardly a mark of distinction.

On the 17th, about ten o'clock, the captain went ashore, and found in the crowd old Geogy and a son of his, who soon made him understand that they wanted to dine with him; and accordingly he brought them, and two more on board. They all called them Areekes (or Kings); but it is doubtful if any of them had the least pretensions to that title over the whole island.



When he got them on board, he went with them all over the ship, which they viewed with uncommon surprize and attention. They happened to have for their entertainment a kind of pie or pudding made of plantains, and some sort of greens which they had got from one of the natives. On this, and on yams, they made a hearty dinner; for, as to the salt beef and pork, they would hardly taste them. In the afternoon, having made each of them a present of a hatchet, a spike-nail, and some medals, they were conducted on shore.

On the 19th, having nothing else to do, the captain went on shore with some wood-cutters, and finding a good number of the natives collected about the landing-place as usual, he distributed among them all the articles he had with him, and then went on board for more. In less than an hour he returned, just as the people were getting some large logs into the boat. At the same time four or five of the natives stepped forward to see what they were about, and as they did not allow them to come within certain limits, unless to pass along the beach, the sentry ordered them back, which they readily complied with.—At this time Captain Cook having his eyes fixed on them, he observed the sentry present his piece (as he thought at these men) and was just going to reprove him for it, because he had observed that, whenever this was done, some of the natives would hold up their arms, to let them see they were equally ready. But he was astonished beyond measure when the sentry fired, for he saw not the least cause. At this outrage most of the people fled; it was only a few he could prevail on to remain. As they ran off, he observed one man to fall; and he was immediately lifted up by two others, who took him into the water, washed his wound, and then led him off. Presently after, some came and described to the captain the nature of his wound; and he sent for the surgeon. As soon as he arrived, the captain went with him to the man, whom they found expiring. The ball had struck his left arm, which was much shattered, and then entered his body by the short ribs, one of which was broken. The rascal who fired, pretended that a man had laid an arrow across his bow, and was going to shoot at him, so that he apprehended himself in danger. But this was no more than they had always done, and with no other view than to shew they were armed as well as they; at least there was reason to think so, as they never went farther. What made this incident the more unfortunate was, it not appearing to be the man who bent the bow that was shot, but one who stood by him. This affair threw the natives into the utmost consternation; and the few that were prevailed on to stay, ran to the plantations and brought cocoa-nuts, &c. which they laid down at their feet. So soon were these daring people humbled! When the captain went on board to dinner they all retired, and only a few appeared in the afternoon, among whom was Paowang. He promised to bring fruit, &c. the next morning, but their early departure put it out of his power.

On the 20th of August they put to sea. These people had not the least knowledge of iron; consequently, nails and iron tools, beads, &c. which had so great a run at the more eastern isles, were of no consideration here; and cloth can be of no use to people who go naked.

In this island hogs did not seem to be scarce; but they saw not many fowls. These are the only domestic animals they have. Land birds are not more numerous than at Otaheite, and the other islands; but they met with some small birds, with a very beautiful plumage, which they had never seen before. There is as great a variety of trees and plants here as at any island they touched at, where their botanists had time to examine. The captain never saw any sort of fishing-tackle amongst them, nor any



one out fishing, except on the shoals, or along the shores of the harbour, where they would watch to strike with a dart such fish as came within their reach; and in this way they were expert. They seemed much to admire the European manner of catching fish with the seine.

These people are of the middle size, rather slender than otherwise; many are little, but few tall or stout; the most of them have good features, and agreeable countenances; they seem to excel in the use of arms, but not to be fond of labour. They never would put a hand to assist in any work they were carrying on, which the people of the other islands used to delight in. They make the females do the most laborious work, as if they were pack-horses. A woman has been seen in this island, carrying a large bundle on her back, or a child on her back, and a bundle under her arm, and a fellow strutting before her with nothing but a club or spear, or some such thing.

The women are not beauties; but they are handsome enough for the men, and too handsome for the use that is made of them. Both sexes are of a very dark colour, but not black; nor have they the least characteristic of the negro about them. They make themselves blacker than they really are, by painting their faces with a pigment of the colour of black lead. They also use another sort which is red, and a third sort brown, or a colour between red and black. All these, but especially the first, they lay on, with a liberal hand, not only on the face, but on the neck, shoulders, and breast. The men wear nothing but a belt, and a wrapping leaf. The women have a kind of petticoat made of the filaments of the plantain tree, flags, or some such thing, which reaches below the knee. Both sexes wear ornaments, such as bracelets, earrings, necklaces, and amulets. The bracelets are chiefly worn by the men; some made of sea-shells, and others of those of the cocoa-nut.

With darts they kill both birds and fish, and are sure of hitting a mark within the compass of the crown of a hat, at the distance of eight or ten yards; but, at double that distance, it is chance if they hit a mark the size of a man's body, though they will throw the weapon sixty or seventy yards. They always throw with all their might, let the distance be what it will. Darts, bows, and arrows are to them what muskets are to Europeans.

Mr. Wales, speaking of their dexterity, says, "I must confess I have been often led to think the feats which Homer represents his heroes as performing with their spears, a little too much of the marvellous to be admitted into an heroic poem; I mean when confined within the strait stays of Aristotle. Nay, even so great an advocate for him as Mr. Pope, acknowledges them to be *surprising*. But since I have seen what these people can do with their wooden spears, and them badly pointed, and not of a very hard nature, I have not the least exception to any one passage in that great poet on this account. But, if I see fewer exceptions, I can find infinitely more beauties in him; as he has, I think, scarce an action, circumstance, or description of any kind whatever, relating to a spear, which I have not seen and recognised amongst these people; as their whirling motion, and whistling noise, as they fly; their quivering motion, as they stick in the ground when they fall; their meditating their aim, when they are going to throw; and their shaking them in their hand as they go along," &c. &c.

As soon as the boats were hoisted in they made sail, and stretched to the eastward, with a fresh gale at south-east. Nothing material occurred till September 4th, when looking south-east, the coast seemed to terminate in a high promontory which the captain named Cape Colnett, after one of his midshipmen, who first discovered this land. After a few hours calm they got a breeze at south-east, and spent the night standing off and on.

Some gaps or openings were seen on the 5th to lie all along the coast, whether they plied up the coast to the south-east or bore down to north-west. They chose the latter; and after running two leagues down the outside of the reef (for such it proved) they came before an opening that had the appearance of a good channel. They wanted to get on shore to have an opportunity to observe an eclipse of the sun, which was soon to happen. With this view they brought-to, hoisted out two armed boats, and sent them to sound the channel; ten or twelve large sailing canoes being then near them. They had observed them coming off from the shore all the morning, from different parts; and some were lying on the reef, fishing, as they supposed. As soon as they all got together, they came down in a body, and were pretty near when they were hoisting out their boats, which probably gave them some alarm; for, without stopping, they hauled in for the reef, and the ship's boat followed them.

The boats having made a signal for a channel, they stood in. Their sounding was from fifteen to twelve fathoms, which shallowed gradually as they approached the shore, when they anchored in five fathoms.

They had hardly got to an anchor, before they were surrounded by a great number of the natives, in sixteen or eighteen canoes, the most of whom were without any sort of weapons. At first they were shy of coming near the ship; but in a short time they prevailed on the people in one boat to get close enough to receive some presents. These they lowered down to them by a rope, to which, in return, they tied two fish that stunk intolerably. These mutual exchanges bringing on a kind of confidence, two ventured on board the ship; and presently after, she was filled with them, and they had the company of several at dinner in the cabin. Pease soup, salt beef, and pork, they had no curiosity to taste; but they eat of some yams. Like all the nations they had lately seen, the men were almost naked. They were curious in examining every part of the ship, which they viewed with uncommon attention. They had not the least knowledge of goats, hogs, dogs, or cats, and had not even a name for one of them. They seemed fond of large spike-nails, and pieces of red cloth, or indeed any other colour; but red was their favourite.

After dinner, the captain went on shore with two armed boats, having with them one of the natives who had attached himself to him. They landed on a sandy beach before a vast number of people, who had got together with no other intent than to see them; for many of them had not a stick in their hands; consequently they were received with great courtesy, and with the surprise natural for people to express, at seeing men and things so new to them as they must be. The captain made presents to all those his new friend pointed out, who were either old men, or such as seemed to be of some note; but he took not the least notice of a few women who stood behind the crowd, keeping back the captain's hand when he was going to give them some beads and medals. Here they found a chief, whose name was Teabooma; and they had not been on shore above ten minutes, before he called for silence. Being instantly obeyed by every individual present, he made a short speech; and soon after another chief having called for silence, made a speech also. It was pleasing to see with what attention they were heard. Their speeches were composed of short sentences; to each of which two or three old men answered by nodding their heads, and giving a kind of grunt, significant of approbation. It was impossible for them to know the purport of these speeches; but they had reason to think they were favourable to them, on whose account they doubtless were made. The natives conducted them, upon enquiring for water, about two miles round the coast, to a little straggling village, near some mangroves; there they landed, and were shewn fresh water. The ground near this vil-  
lage

lage was finely cultivated, being laid out in plantations of sugar-canes, plantains, yams, and other roots. They heard the crowing of cocks, but saw none. Some roots were baking on a fire, in an earthen jar, which would have held six or eight gallons; nor did they doubt its being their own manufacture. As they proceeded up the creek, Mr. Forster having shot a duck flying over their heads, which was the first use these people saw made of fire-arms, the native, whom Captain Cook distinguished by the name of his friend, begged to have it; and when he landed, told his countrymen in what manner it was killed. The day being far spent, and the tide not permitting them to stay longer in the creek, they took leave of the people, and got on board a little after sun-set.

Next morning they were visited by some hundreds of the natives; some coming in canoes, and others swimming off; so that before ten o'clock, their decks, and all other parts of the ship, were quite full. The captain's friend, who was of the number, brought him a few roots, but all the others came empty in respect to eatables. Some few had with them their arms, such as clubs and darts, which they exchanged for nails, pieces of cloth, &c. Next day Mr. Wales, accompanied by Lieutenant Clerk, went to make preparations for observing the eclipse of the sun, which was to be in the afternoon.

In the evening, the captain went ashore to the watering-place. Excellent wood for fuel was here, far more convenient to procure than water, but this was an article they did not want. About seven o'clock in the evening of September 6th, died Simon Monk, their butcher, a man much esteemed in the ship; his death was occasioned by a fall down the fore-hatch-way the preceding night.

This afternoon a fish being struck by one of the natives near the watering-place, the captain's clerk purchased it, and sent to him after his return on board. It was of a new species, something like a sun-fish, with a large, long, ugly head. Having no suspicion of its being of a poisonous nature, they ordered it to be dressed for supper; but, very luckily, the operation of drawing and describing took up so much time, that it was too late, so that only the liver and roe was dressed, of which the two Mr. Forsters and the captain did but taste. About three o'clock in the morning, they all found themselves seized with an extraordinary weakness and numbness all over their limbs. The captain had almost lost the sense of feeling; nor could he distinguish between light and heavy bodies, of such as he had strength to move; a quart pot, full of water, and a feather, being the same in his hand. They each of them took an emetic, and after that a sweat, which gave them much relief. In the morning, one of the pigs, which had eaten the entrails was found dead. When the natives came on board and saw the fish hang up, they immediately gave them to understand it was not wholesome food, and expressed the utmost abhorrence of it; though no one was observed to do this when the fish was to be sold, or even immediately after it was purchased.

On the 8th, the guard and a party of men were on shore as usual. In the afternoon the captain received a message from the officer, acquainting him that Teabooma the chief was come, with a present, consisting of a few yams and sugar-canes. In return, he sent him, amongst other articles, a dog and a bitch, both young, but nearly full grown. The dog was red and white, but the bitch was all red, or the colour of an English fox. The captain says, he mentions this, because they may prove the Adam and Eve of their species in that country. When the officer returned on board in the evening, he informed the captain that the chief came, attended by about twenty men, so that it looked like a visit of ceremony. It was some time before he would believe the

the dog and bitch were intended for him ; but as soon as he was convinced, he seemed lost in an excess of joy, and sent them away immediately.

Next morning early, the 9th, Lieutenant Pickersgill and Mr. Gilbert were sent with the launch and cutter to explore the coast to the west. The two Mr. Forsters and the captain were confined on board, though much better, a good sweat having had an happy effect. In the afternoon, a man was seen, both ashore and along side the ship, said to be as white as an Européan. From the account obtained of this circumstance, his whiteness did not proceed from hereditary descent, but from chance or some disease.

On the 10th, a party was sent on shore as usual, and Mr. Forster was so well recovered as to go out botanizing.

In the evening of the 11th, the boats returned, when the captain was informed, the cutter was near being lost, by suddenly filling with water, which obliged them to throw several things overboard, before they could free her and stop the leak she had sprung. From a fishing canoe, which they met coming in from the reefs, they got as much fish as they could eat ; and they were received by Teabi, the chief of the isle of Balabea, and the people, who came in numbers to see them, with great courtesy. In order not to be too much crowded, they drew a line on the ground, and gave the natives to understand they were not to come within it. This restriction they observed ; and one of them soon after turned it to his own advantage : for happening to have a few cocoa-nuts, which one of the sailors wanted to buy, and he was unwilling to part with, he walked off, and was followed by the man who wanted them. On seeing this he sat down on the sand, made a circle round him, as he had seen them do, and signified that the other was not to come within it ; which was accordingly observed. This story, the captain says, was well attested.

In the afternoon of the 12th, the captain went on shore, and on a large tree, which stood close to the shore, near the watering place, had an inscription cut, setting forth the ship's name, date, &c. as a testimony of their being the first discoverers of this country, as he had done at all others at which they had touched, where this ceremony was necessary. This being done, they took leave of the natives, and returned on board ; when he ordered all the boats to be hoisted in, in order to be ready to put to sea in the morning.

The people of this island are strong, robust, active, and well-made ; they are also courteous and friendly, and not in the least addicted to pilfering, which is more than can be said of any other nation in this sea. They are nearly of the same colour as the natives of Tanna, but have better features, more agreeable countenances, and are a much stouter race ; a few being seen who measured six feet four inches. Their hair and beards are in general black. The former is very much frizzled ; so that, at first sight, it appears like that of a negro. It is, nevertheless, very different ; though both coarser and stronger. Some who wear it long, tie it up on the crown of the head ; others suffer only a large lock to grow on each side, which they tie up in clubs ; many others, as well as all the women, wear it cropped short. These rough heads most probably want frequent scratching ; for which purpose they have a most excellent instrument. This is a kind of comb made of sticks of hard wood, from seven to nine or ten inches long, and about the thickness of knitting needles. A number of these, seldom exceeding twenty, but generally fewer, are fastened together at one end, parallel to, and near 1-10th of an inch from each other. The other ends, which are a little pointed, will spread out or open like the sticks of a fan, by which means they can

can beat up the quarters of a hundred lice at a time. These combs, or scratchers, for they serve both purposes, they always wear in their hair on one side of their head. The people of Tanna have an instrument of this kind for the same use; but theirs is forked, never exceeding three or four prongs, and sometimes only a small pointed stick. Their beards, which are of the same crisp nature as their hair, are for the most part worn short. Swelled and ulcerated legs and feet are common among the men, as also a swelling of the scrotum. It is not known whether this is occasioned by disease, or by the mode of applying the wrapper, which they use as at Tanna and Mallicollo. This is their only covering, and is generally made of the bark of a tree, but sometimes of leaves. The small pieces of cloth, paper, &c. which they got from them, were commonly applied to this use. Some had a kind of concave, cylindrical, stiff black cap, which appeared to be a great ornament among them; and they supposed was only worn by men of note, or warriors. A large sheet of strong paper, when they got one in exchange for any thing, was generally applied to this use.

Their houses, or at least most of them, are circular; something like a bee hive, and full as close and warm. The entrance is by a small door, or long square hole, just big enough to admit a man bent double. The side-walls are about four feet and a half high; but the roof is lofty, and peaked to a point at the top; above which is a post or stick of wood, which is generally ornamented either with carving, or shells, or both. In most of them they found two fire-places, and commonly a fire burning; and as there was no vent for the smoke but by the door, the whole house was both smoky and hot, inasmuch that they, who were not used to such an atmosphere, could hardly endure it a moment.

In some respects their habitations are neat; for, besides the ornaments at top, there were some with carved door-posts. Upon the whole, their houses are better calculated for a cold than a hot climate; and as there are no partitions in them, they can have little privacy.

They have no great variety of household utensils; earthen jars being the only article worth notice. Each family has, at least, one of them; in which they bake their roots, and perhaps their fish, &c. The fire, by which they cook their victuals, is on the outside of each house, in the open air.

They subsist chiefly on roots and fish, and the bark of a tree, which also grows in the West Indies. This they roast, and are almost continually chewing. Water is their only liquor; at least, they never saw any other made use of. It seems to be a country unable to support many inhabitants. Nature has been less bountiful to it than to any other tropical island known in this sea. The greatest part of its surface consists of barren rocky mountains; and the grass, &c. growing on them is useless to people who have no cattle.

Nevertheless, here are several plants, &c. common to the eastern and northern islands, and even a species of the passion-flower, which has never before been known to grow wild any where but in America. The botanists did not complain for want of employment at this place; every day bringing to light something new in botany or other branches of natural history. Land-birds, indeed, are not numerous, but several are new; or at least such as they never saw before.

All their endeavours to get the name of the whole island, proved ineffectual. Probably, it is too large for them to know by one name. Whenever they made this inquiry, they always gave them the name of some district or place, which they pointed to. Hence Captain Cook imagines that the country is divided into several districts, each governed by a chief; but they know nothing of the extent of his power. Balade

was the name of the district they were at, and Teabooma the chief. He lived on the other side of the ridge of hills, so that they had but little of his company, and therefore could not see much of his power. *Tea* seems to be a title prefixed to the names of all, or most of their chiefs or great men. The captain was by one of their principal men called *Tea Cook*.

Their fishing implements are turtle nets, made of the filaments of the plantain-tree twisted; and small hand-nets, with very minute meshes, made of fine twine, and fish-gigs. Their general method of fishing, is to lie on the reefs in shoal water, and to strike the fish that may come in their way.

The women of this country, and likewise those of Tanna, are far more chaste than those of the most eastern islands. The captain says, he never heard that one of his people obtained the least favour from any one of them. The ladies here would frequently divert themselves, by going a little aside with the officers, as if they meant to be kind to them, and then would run away, laughing at them. Whether this was chastity or coquetry, cannot be determined, nor is it material, since the consequences were the same.

Every thing being in readiness to put to sea, at sun-rise, on the 13th of September, they weighed, and with a fine gale at east-by-south, stood out for the same channel they came in by.

Nothing remarkable occurred till the 28th in the evening, when two low islets were seen bearing west-by-south, and as they were connected by breakers, which seemed to join those on their starboard, it became necessary to haul off south-west, in order to get clear of them. At three, more breakers appeared, extending from the low isles towards the south-east. They now hauled out close to the wind, and in an hour and an half, were almost all on board the breakers, and obliged to tack. From the mast-head, they were seen to extend as far as east-south-east, and the smoothness of the sea made it probable that they extended to the north of east, and that they were in a manner surrounded by them.

They spent the night in making short boards, under the terrible apprehension, every moment, of falling on some of the many dangers which surrounded them.

Day-light shewed that their fears were not ill-founded, and that they had been in the most imminent danger, having had breakers continually under their lee, and at a very little distance from them. They owed their safety to the interposition of Providence, a good look-out, and the very brisk manner in which the ship was managed; for, as they were standing to the north, the people on the lee gangway and fore-castle saw breakers under the lee-bow, which they escaped by quickly tacking the ship.

They were now almost tired of a coast which they could no longer explore, but at the risk of losing the ship, and ruining the whole voyage.

The ship was at this time conducted by an officer placed at the mast-head: soon after, with great difficulty, they arrived within a mile of land, and were obliged to anchor in thirty-nine fathoms water; they then hoisted out a boat, in which the captain went ashore, accompanied by the botanists. Here they found several tall trees, which had been observed before at a considerable distance; they appeared to be a kind of spruce pine, very proper for spars, of which they were in want: after making this discovery, they hastened on board, in order to have more time after dinner, when they landed again with two boats, accompanied by several of the officers and gentlemen, having with them the carpenter and some of the crew, to cut down such trees as were wanting.



The little isle upon which they landed is a mere sand-bank, not exceeding three-fourths of a mile in circuit, and on it, besides these pines, grew the *Etos* tree of Otaheite, and a variety of other trees, shrubs, and plants. These gave sufficient employment to the botanists, all the time they staid upon it, and occasioned the captain's calling it Botany Isle. On it were several water-snakes, some pigeons and doves, seemingly different from any they had seen. One of the officers shot a hawk, which proved to be of the very same sort as the English fishing-hawks. Several fire-places, branches and leaves very little decayed, remains of turtle, &c. shewed that people had lately been on the isle. The hull of a canoe lay wrecked in the sand. They were now no longer at a loss to know of what trees they make their canoes, as they can be no other than these pines.

They also found on the isle a sort of scurvy-grass, and a plant called by them Lamb's Quarters, which, when boiled, eats like spinach.

Having got ten or twelve small spars, to make studding sail booms, boats, masts, &c. and night approaching, they returned with them on board.

The purpose for which they anchored under this isle being answered, it was necessary to consider what was next to be done. They had, from the top-mast head, taken a view of the sea around, and observed the whole, to the west, to be strewed with small islets, sand-banks, and breakers, to the utmost extent of their horizon.—This induced the captain to try to get without the shoals; that is, to the southward of them.

Next morning, at day-break, the 30th of September, they got under sail.

The wind continuing at south-west, west-south-west, and west, blowing a fresh gale, and now and then squalls, with showers of rain, they steered to the south-south-east, without meeting with any remarkable occurrence till near noon on the 6th of October, when it fell calm. In the afternoon, they had a boat in the water, and shot two albatrosses, which were geese to them. They had seen one of this kind of birds the day before, which was the first they observed since they had been within the tropic.

In the evening of the 8th, Mr. Cooper having struck a porpoise with a harpoon, it was necessary to bring to, and have two boats out, before they could kill it, and get it on board. It was six feet long; a female of that kind, which naturalists call dolphins of the ancients, and which differs from the other kind of porpoise in the head and jaw, having them long and pointed. This had eighty-eight teeth in each jaw. The hacket and lean flesh were to them a feast. The latter was a little liverish, but had not the least fishy taste. It was eaten roasted, broiled, and fried, first soaking it in warm water. Indeed, little art was wanting to make any thing fresh palatable to those who had been living so long on salt meat.

They continued to stretch to west-south-west till the 10th, when at day-break they discovered land, bearing south-west, which on a nearer approach they found to be an island of good height, and five leagues in circuit. It was named Norfolk Isle, in honour of the noble family of Howard. After dinner a party embarked in two boats, and landed on the island without any difficulty, behind some large rocks, which lined part of the coast.

They found it uninhabited, and were undoubtedly the first that ever set foot on it. They observed many trees and plants common at New Zealand; and, in particular, the flax plant, which is rather more luxuriant here than in any part of that country; but the chief produce is a sort of spruce pine, which grows in abundance, and to a large size, many of the trees being as thick, breast high, as two men could fathom, and exceedingly straight and tall. It is a good deal like the Quebec pine. For about two



hundred yards from the shore, the ground is covered so thick with shrubs and plants, as hardly to be penetrated farther inland. The woods were perfectly clear and free from underwood, and the soil seemed rich and deep.

They found the same kind of pigeons, parrots, and parroquets as in New Zealand, rails, and some small birds. The sea-fowl are white boobies, gulls, terns, &c. which breed undisturbed on the shores, and in the cliffs of the rocks.

On the isle is fresh water; and cabbage-palm, wood-forrel, fow-thistle, and samphire, abounding in some places on the shore; they brought on board as much of each sort as the time they had to gather them would admit.

The approach of night brought them all on board, when they hoisted in the boats, and stretched to east-north-east.

After leaving Norfolk Isle, they steered for New Zealand, intending to touch at Queen Charlotte's Sound, to refresh the crew, and put the ship in a condition to encounter the southern latitudes.

On the 17th, at day-break, they saw Mount Egmont, which was covered with everlasting snow, bearing south-east-half-east. Their distance from the shore was about eight leagues.

On the 18th, at eleven o'clock, they anchored before Ship Cove; the strong flurries from off the land not permitting them to get in.

In the afternoon, as they could not move the ship, the captain went into the Cove, with the seine, to try to catch some fish. The first thing he did after landing, was to look for the bottle he left hid when last here, in which was the memorandum. It was taken away, but by whom it did not appear. Two hauls with the seine producing only four small fish, they in some measure made up for this deficiency by shooting several birds, which the flowers in the garden had drawn thither, as also some old shags, and by robbing the nests of some young ones.

Being little wind next morning, they weighed and warped the ship into the Cove, and there moored with the two bowers. Here the forge was erected, and the ship and rigging repaired. The captain gave orders that vegetables (of which there were plenty) should be boiled every morning with oat-meal and portable broth for breakfast, and with pease and broth every day for dinner, for the whole crew, over and above their usual allowance of salt meat.

In the afternoon, as Mr. Wales was setting up his observatory, he discovered that several trees, which were standing when they last sailed from this place, had been cut down with saws and axes. It was therefore now no longer to be doubted that the Adventure had been in this Cove after they had left it.

Nothing remarkable happened till the 24th, when, in the morning, two canoes were seen coming down the Sound; but as soon as they perceived the ship, they retired behind a point on the west side. After breakfast, they went in a boat to look for them; and as they proceeded along the shore, they shot several birds. The report of the musquets gave notice of their approach, and the natives discovered themselves in Shag Cove by hallooing to them. The moment they landed, they knew them. Joy then took place of fear; and the rest of the natives hurried out of the woods, and embraced them over and over again, leaping and skipping about like madmen; but it was observed that they would not suffer some women, whom they saw at a distance, to come near them. After they had made them presents of hatchets, knives, and what else they had with them, they gave in return a large quantity of fish, which they had just caught. After a short stay, they took leave, and went on board.

Next morning early, the inhabitants paid them a visit on board, and brought with them a quantity of fine fish, which they exchanged for Otaheitean cloth, &c. and then returned to their habitations.

On the 26th, the natives brought a plentiful supply of fish.

On the 28th, a party went a shooting to West Bay, and came to the place where they left the hogs and fowls; but saw no vestiges of them, nor of any body having been there since. In their return, having visited the natives, they got some fish in exchange for trifles which they gave them. As they were coming away, Mr. Forster thought he heard the squeaking of a pig in the woods, close by their habitations; probably they may have those they left with them when last here. In the evening, they got on board with about a dozen and a half of wild-fowl, flags, and sea-pies. The sportsmen who had been out in the woods near the ship, were more successful among the small birds.

On the 6th, their old friends having taken up their abode near them, one whose name was Pedro, (a man of some note) made the captain a present of a staff of honour, such as the chiefs generally carry. In return, he dressed him in a suit of old clothes, of which he was not a little proud. He had a fine person, and a good presence, and nothing but his colour distinguished him from an European. Having got him and another into a communicative mood, he began to inquire of them if the Adventure had been there during his absence; and they gave him to understand, in a manner which admitted of no doubt, that, soon after they were gone, she arrived; that she staid between ten and twenty days, and had been gone ten months.

After breakfast, he took a number of hands, in order to catch a sow that had been there for some time (her companion having been killed) to put her to the boar and remove her to some other place; but they returned without seeing her. Some of the natives had been there not long before, as their fires were yet burning; and they had undoubtedly taken her away.

The 8th, they put two pigs, a boar and a sow, on shore, in the cove next Cannibal Cove; so that it is hardly possible all the methods the captain has taken to stock this country with these animals should fail.

On the 9th, the natives having brought a very large and seasonable supply of fish, the captain bestowed on Pedro a present of an empty oil-jar, which made him as happy as a prince.

In the afternoon, a party went on shore into one of the coves, where two families of the natives were variously employed; some sleeping, some making mats, others roasting fish and fern-roots, and one girl was heating of stones. As soon as the stones were hot, she took them out of the fire, and gave them to an old woman who was sitting in the hut. She placed them in a heap, laid over them a handful of green celery, and over that a coarse mat, and then squatted herself down, on her heels, on the top of all; thus making a kind of Dutch warming-pan, on which she sat as close as a hare on her seat. The captain says, he should hardly have mentioned this operation, if he had thought it had no other view than to warm the old woman's backside. He rather supposes it was intended to cure some disorder she might have on her, which the steams arising from the green celery might be a specific for.

On the 10th of November, they weighed and stood out of the Sound, and steered for Cape Campbell. At four in the afternoon, they passed the cape, at the distance of four or five leagues.

Next morning the wind veered round by the west to south, and forced them more to the east than they had any view of going. The captain's intention now was to cross

cross this vast ocean, so as to pass over those parts which were left unexplored the preceding summer.

On Saturday the 17th of December they made the land, extending from north-east-by-north to east-by-south about six leagues distant. On this discovery, they wore and brought-to, with the ship's head to the south; and having sounded, found seventy-five fathoms water, the bottom stone and shells. The land now before them could be no other than the west coast of Terra del Fuego, and near the west entrance of the straits of Magalhaens.

This was the first run that had been made directly across this ocean in a high southern latitude. The captain says, he never made a passage, any where, of such length, where so few interesting circumstances occurred; for, the variation of the compass excepted, he met with nothing else worth notice. Here they took their leave of the South Pacific Ocean.

## AN ABSTRACT OF CAPTAIN COOK'S LAST VOYAGE.

*Begun in 1776, and finished in 1780.*

### PART I.

*Transactions from the Commencement of the Voyage in February 1776, to the quitting of New Zealand in February 1777.*

CAPTAIN COOK and Captain Clerke received their commissions for making discoveries in the northern hemisphere, in order to determine the position and extent of the west side of North America, its distance from Asia, and the practicability of a northern passage to Europe.

Captain Cook was appointed to the command of His Majesty's sloop the *Resolution*, and Captain Clerke to that of the *Discovery*, a ship of three hundred tons burthen, purchased into the service.

They immediately prepared for their voyage, by taking on board all the necessary stores, and a considerable quantity of iron tools and trinkets, which might enable them to cultivate a friendly intercourse with the inhabitants of such countries as they might be fortunate enough to meet with; they also took some live stock, consisting of sheep, two cows with their calves, and a bull; they were likewise furnished with a quantity of European garden-seeds, which could not fail of being valuable presents to the new discovered islands.

As they were to touch at Otaheite, in their way to the intended scene of fresh operations, they were ordered to carry Omai back to his native country. He left London with a mixture of regret and satisfaction: when he talked of his friends in England, it was with difficulty he refrained from tears; but the instant the conversation turned to his own country, his eyes sparkled with joy. He was loaded with presents of considerable value by His Majesty, Lord Sandwich, Mr. Banks (now Sir Joseph), and other persons of distinction.

Several months were spent in preparation for this long and important voyage; both the ships arrived in Plymouth Sound on the 30th of June; here they made a short stay to take in some additional provisions, to replace what had been expended, also a quantity of port-wine; and the petty officers and seamen received two months' wages in advance. Contrary winds, and other circumstances of little consequence, prevented their clearing the Channel till the 14th of July in the evening. There were on board the two ships one hundred and ninety-two persons, officers included.

*Nothing very interesting happened from the 5th of December till the 26th of January, when they arrived at Van Diemen's Land; where, as soon as they had anchored in Adventure Bay, Captain Cook says, — I ordered the boats to be hoisted out. In one of them I went myself, to look for the most commodious place for furnishing ourselves*  
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with the necessary supplies; and Captain Clerke went in his boat upon the same service.

Next morning early, I sent Lieutenant King to the east side of the bay, with two parties; one to cut wood, and the other grass, under the protection of the marines. For although, as yet, none of the natives had appeared, there could be no doubt that some were in our neighbourhood: I also sent the launch for water; and afterwards visited all the parties myself. In the evening we drew the seine at the head of the bay, and at one haul caught a great quantity of fish. Most of them were of that sort known to seamen by the name of elephant fish. After this every one repaired on board with what wood and grass we had cut, that we might be ready to sail whenever the wind should serve.

In the afternoon, next day, we were agreeably surprised, at the place where we were cutting wood, with a visit from some of the natives, eight men and a boy. They approached us from the woods, without betraying any marks of fear, for none of them had any weapons, except one, who held in his hand a stick about two feet long, and pointed at one end.

They were quite naked, and wore no ornaments, unless we consider as such, and as a proof of their love of finery, some large punctures or ridges raised on different parts of their bodies, some in straight, and others in curved lines.

They were of common stature, but rather slender. Their skin was black, and also their hair, which was as woolly as that of any native of Guinea; but they were not distinguished by remarkably thick lips, nor flat noses; on the contrary, their features were far from being disagreeable. They had pretty good eyes; and their teeth were tolerably even, but very dirty. Most of them had their hair and beards smeared with a red ointment; and some had their faces also painted with the same composition.

They received every present we made to them without the least appearance of satisfaction. When some bread was given, as soon as they understood that it was to be eaten, they either returned it, or threw it away, without even tasting it. They also refused some elephant fish, both raw and dressed, which we offered to them; but upon giving some birds to them, they did not return these, and easily made us comprehend that they were fond of such food. I had brought two pigs ashore, with a view to leave them in the woods. The instant these came within their reach, they seized them, as a dog would have done, by the ears, and were for carrying them off immediately, with no other intention, as we could perceive, but to kill them.

Being desirous of knowing the use of the stick which one of our visitors carried in his hand, I made signs to them to shew me; and so far succeeded, that one of them set up a piece of wood as a mark, and threw at it, at the distance of about twenty yards; but we had little reason to commend his dexterity, for after repeated trials he was still very wide from the object. Omai, to shew them how much superior our weapons were to theirs, then fired his musquet at it; which alarmed them so much, that notwithstanding all we could do or say, they ran instantly into the woods. One of them was so frightened, that he let drop an axe and two knives that had been given to him. From us, however, they went to the place where some of the Discovery's people were employed in taking water into their boat. The officer of that party, not knowing that they had paid us so friendly a visit, nor what their intent might be, fired a musquet in the air, which sent them off with the greatest precipitation.

Thus ended our first interview with the natives. Immediately after their final retreat, judging that their fears would prevent their remaining near enough to observe what

what was passing, I ordered the two pigs, being a boar and a sow, to be carried about a mile within the woods, at the head of the bay. I saw them left there by the side of a fresh-water brook. A young bull and a cow, and some sheep and goats, were also, at first, intended to have been left by me, as an additional present to Van Diemen's Land. But I soon laid aside all thoughts of this, from a persuasion that the natives, incapable of entering into my views of improving their country, would destroy them.

The morning of the 29th we had a dead calm, which continued all day, and effectually prevented our sailing. I therefore sent a party over to the east point of the bay to cut grass, having been informed that some of a superior quality grew there. Another party, to cut wood, was ordered to go to the usual place, and I accompanied them myself. We had observed several of the natives, this morning, sauntering along the shore, which assured us that though their consternation had made them leave us so abruptly the day before, they were convinced that we intended them no mischief, and were desirous of renewing the intercourse. It was natural that I should wish to be present on the occasion.

We had not been long landed before about twenty of them, men and boys, joined us, without expressing the least sign of fear or distrust. There was one of this company conspicuously deformed; and who was not more distinguishable by the hump on his back, than by the drollery of his gestures, and the seeming humour of his speeches; which he was very fond of exhibiting, as we supposed, for our entertainment: but, unfortunately, we could not understand him; the language spoken here being wholly unintelligible to us. It appeared to me, to be different from that spoken by the inhabitants of the more northern parts of this country, whom I met with in my first voyage; which is not extraordinary, since those we then saw, and those we then visited, differ in many other respects. Nor did they seem to be such miserable wretches as the natives whom Dampier mentions to have seen on its western coast.

Some of our present groupe wore loose round their necks three or four folds of small cord, made of the fur of some animal; and others of them had a narrow slip of the kangooroo skin tied round their ancles. I gave to each of them a string of beads and a medal, which I thought they received with some satisfaction. They seemed to set no value on iron or on iron tools: they were even ignorant of the use of fish-hooks, if we might judge from their manner of looking at some of ours which we shewed to them.

We cannot, however, suppose it to be possible that a people who inhabit a sea-coast, and who seem to derive no part of their sustenance from the productions of the ground, should not be acquainted with some mode of catching fish, though we did not happen to see any of them thus employed, nor observe any canoe or vessel in which they could go upon the water. Their habitations were little sheds or hovels built of sticks, and covered with bark. We could also perceive evident signs of their sometimes taking up their abode in the trunks of large trees, which had been hollowed out by fire, most probably for this very purpose.

After staying about an hour with the wooding party and the natives, as I could now be pretty confident that the latter were not likely to give the former any disturbance, I left them, and went over to the grass-cutters, and found that they had met with a fine patch. Having seen the boats loaded, I left that party, and returned on board to dinner; where, some time after, Lieutenant King arrived.

From him I learnt that I had but just left the shore, when several women and children made their appearance. These females wore a kangooroo skin tied over the shoulders,

shoulders, and round the waist. But its only use seemed to be to support their children when carried on their backs; for it did not cover those parts which most nations conceal; being, in all other respects, as naked as the men, and as black, and their bodies marked with scars in the same manner. But in this they differed from the men; that though their hair was of the same colour, some of them had their heads completely shorn; in others, this operation had been performed only on one side, while the rest of them had all the upper part of the head shorn close, leaving a circle of hair all round, somewhat like the tonsure of the Romish ecclesiastics. Many of the children had fine features, and were thought pretty; but of the persons of the women, especially those advanced in years, a less favourable report was made. However, some of the gentlemen belonging to the Discovery, I was told, paid their addresses, and made liberal offers of presents, which were rejected with great disdain; whether from a sense of virtue, or the fear of displeasing their men, I shall not pretend to determine. That this gallantry was not very agreeable to the latter, is certain; for an elderly man, as soon as he observed it, ordered all the women and children to retire, which they obeyed, though some of them shewed a little reluctance.

Mr. Anderson, my surgeon, with his usual diligence, spent the few days we remained in Adventure Bay, in examining the country. His account of its natural productions, with which he favoured me, will more than compensate for my silence about them: some of his remarks on the inhabitants will supply what I may have omitted or represented imperfectly; and his specimen of their language, however short, will be thought worth attending to, by those who wish to collect materials for tracing the origin of nations. I shall only premise, that the tall straight forest-trees which Mr. Anderson describes in the following account, are of a different sort from those which are found in the more northern parts of this coast. The wood is very long and close-grained, extremely tough, fit for spars, oars, and many other uses; and would, on occasion, make good masts (perhaps none better) if a method could be found to lighten it. Upon the whole, it has many marks of being naturally a very dry country; and perhaps might, independent of its wood, be compared to Africa, about the Cape of Good Hope, though that lies ten degrees farther northward, rather than to New Zealand, on its other side, in the same latitude, where we find every valley, however small, furnished with a considerable stream of water. It was remarked, that birds were seldom killed an hour or two, before they were almost covered with small maggots, which I would rather attribute merely to the heat; as we had not any reason to suppose there is a peculiar disposition in the climate to render substances soon putrid.

The only animal of the quadruped kind we got, was a sort of opossum, about twice the size of a large rat; and is, most probably, the male of that species found at Endeavour River. It is of a dusky colour above, tinged with a brown or rusty cast, and whitish below. About a third of the tail, towards its tip, is white, and bare underneath, by which it probably hangs on the branches of trees, as it climbs these and lives on berries. The kangaroo, another animal found farther northward in New Holland, without doubt also inhabits here, as the natives we met with had some pieces of their skins, and we several times saw animals, though indistinctly, run from the thickets when we walked in the woods, which, from the size, could be no other.

There are several sorts of birds, but all so scarce and shy, that they are evidently harassed by the natives, who, perhaps, draw much of their subsistence from them. In the woods, the principal sorts are large brown hawks, or eagles; crows, nearly the same as ours in England; yellowish paroquets; and large pigeons. There are also three or four small birds, one of which is of the thrush kind; another small one, with  
a pretty



a pretty long tail, has part of the head and neck of a most beautiful azure colour; from whence we named it *motacylla cyanea*. On the shore were several common and sea gulls, a few black oyster-catchers, or sea-pies, and a pretty plover, of a stone colour, with a black hood. About the pond or lake behind the beach, a few wild ducks were seen; and some shags used to perch upon the high leafless trees near the shore.

Some pretty large blackish snakes were seen in the woods; and we killed a large, hitherto unknown, lizard, fifteen inches long, and six round, elegantly clouded with black and yellow; besides a small tortoise, of a brown gilded colour above, and rusty below.

The sea affords a much greater plenty, and at least as great a variety as the land. Of these the elephant-fish, or pejegallo, mentioned in Frazier's Voyage, are the most numerous; and though inferior to many other fish, were very palatable food. Several large rays, nurfes, and small leather-jackets were caught, with some small white bream, which were firmer and better than those caught in the lake. We likewise got a few soles and flounders; two sorts of gurnards, one of them a new species; some small spotted mullet; and very unexpectedly, the small fish with a silver band on its side, called *atherina hepsetus*, by Hasselquist.

But that next in number, and superior in goodness, to the elephant-fish, was a sort none of us recollected to have seen before. It partakes of the nature both of a round and of a flat fish, having the eyes placed very near each other; the fore-part of the body much flattened or depressed, and the rest rounded. It is of a brownish sandy colour, with rusty spots on the upper part, and below. From the quantity of slime it was always covered with, it seems to live after the manner of flat-fish, at the bottom.

Upon the rocks are plenty of muscles, and some other small shell-fish. There are also great numbers of sea-stars, some small limpets, and large quantities of sponge; one sort of which, that is thrown on shore by the sea, but not very common, has a most delicate texture.

Many pretty Medusa's heads were found upon the beach; and the stinking laplyfia, or sea-hare, which, as mentioned by some authors, has the property of taking off the hair by the acrimony of its juice; but this sort was deficient in this respect.

Insects, though not numerous, are here in considerable variety. Amongst them are grasshoppers, butterflies, and several sorts of small moths, finely variegated. There are two sorts of dragon-flies, gad-flies, camel-flies, several sorts of spiders, and some scorpions; but the last are rather rare. The most troublesome, though not very numerous tribe of insects, are the musquitoes; and a large black ant, the pain of whose bite is almost intolerable, during the short time it lasts. The musquitoes, also, make up for the deficiency of their number, by the severity of their venomous proboscis.

The inhabitants whom we met with here, had little of that fierce or wild appearance common to people in their situation; but, on the contrary, seemed mild and cheerful, without reserve, or jealousy of strangers. This; however, may arise from their having little to lose or care for.

With respect to personal activity or genius, we can say but little of either. They do not seem to possess the first in any remarkable degree; and as for the last, they have, to appearance, less than even the half-animated inhabitants of Terra del Fuego, who have not invention sufficient to make cloathing for defending themselves from the rigour of their climate, though furnished with the materials. The small stick, rudely pointed, which one of them carried in his hand, was the only thing we saw that required

any mechanical exertion, if we except the fixing on the feet of some of them pieces of kangaroo skin, tied with thongs; though it could not be learnt whether these were in use as shoes, or only to defend some fore. It must be owned, however, they are masters of some contrivance in the manner of cutting their arms and bodies in lines of different lengths and directions; which are raised considerably above the surface of the skin, so that it is difficult to guess the method they use in executing this embroidery of their persons.

Their colour is a dull black, and not quite so deep as that of the African negroes. Their hair, however, is perfectly woolly, and it is clotted or divided into small parcels like that of the Hottentots, with the use of some sort of grease, mixed with a red paint or ochre which they smear in great abundance over their heads. Their noses, though not flat, are broad and full; their eyes are of a middling size, with the white less clear than in us; and though not remarkably quick or piercing, such as give a frank cheerful cast to the whole countenance. Their teeth are broad, but not equal, nor well set; and either from nature, or from dirt, not of so true a white as is usual among people of a black colour. Their mouths are rather wide; but this appearance seems heightened by wearing their beards long, and clotted with paint, in the same manner as the hair on their heads.

The following is a specimen of Van Diemen's Land vocabulary.

<i>Quadne,</i>	A woman.
<i>Eve'rai,</i>	The eye.
<i>Muidje,</i>	The nose.
<i>Ka'my,</i>	The teeth, mouth, or tongue.
<i>Lae'renne,</i>	A small bird, a native of the woods here.
<i>Koy'gee,</i>	The ear.
<i>No'onga,</i>	Elevated scars on the body.
<i>Tee'gera,</i>	To eat.
<i>Toga'rago,</i>	I must be gone, <i>or</i> , I will go.

I have no doubt but we shall find, on a diligent inquiry, and when opportunities offer to collect accurately a sufficient number of these words, and to compare them, that all the people from New Holland, eastward to Easter Island, have been derived from the same common root.

At eight o'clock in the morning of the 30th of January, a light breeze springing up at west, we weighed anchor, and put to sea from Adventure Bay.

We pursued our course to the eastward, without meeting any thing worthy of note, till the night between the 6th and 7th of February, when a marine belonging to the Discovery fell overboard, and was never seen afterward. This was the second misfortune of the kind that had happened to Captain Clerke since he left England.

On the 16th of February, at four in the afternoon, we discovered the land of New Zealand. The part we saw, proved to be Rock's Point, and bore south-east-by-south, about eight or nine leagues distant.

We had not been long at anchor in Queen Charlotte Sound, before several canoes, filled with natives, came alongside of the ships; but very few of them would venture on board; which appeared the more extraordinary, as I was well known to them all. There was one man in particular amongst them, whom I had treated with remarkable kindness, during the whole of my stay when I was last here. Yet now, neither professions of friendship, nor presents, could prevail upon him to come into the ship. This shyness was to be accounted for, only on this supposition, that they were apprehensive

hensive we had revisited their country, in order to revenge the death of Captain Furneaux's people.

On the 13th we set up two tents, one from each ship, on the same spot where we had pitched them formerly. The observatories were at the same time erected; and Messrs. King and Bayley began their operations immediately, to find the rate of the time-keeper, and to make other observations. The remainder of the empty water-casks were also sent on shore, with the cooper to trim, and a sufficient number of sailors to fill them. Two men were appointed to brew spruce-beer; and the carpenter and his crew were ordered to cut wood. A boat, with a party of men under the direction of one of the mates, was sent to collect grafs for our cattle; and the people that remained on board were employed in refitting the ship, and arranging the provisions. In this manner, we were all profitably busied during our stay. For the protection of the party on shore, I appointed a guard of ten marines, and ordered arms for all the workmen: Mr. King, and two or three petty officers, constantly remaining with them. A boat was never sent to any considerable distance from the ships without being armed, and under the direction of such officers as I could depend upon, and who were well acquainted with the natives.

During the course of this day, a great number of families came from different parts of the coast, and took up their residence close to us; so that there was not a spot in the cove where a hut could be put up, that was not occupied by them, except the place where we had fixed our little encampment.

It is curious to observe, with what facility they build their little huts. I have seen above twenty of them erected on a spot of ground, that, not an hour before, was covered with shrubs and plants. They generally bring some part of the materials with them, the rest they find upon the premises. I was present when a number of people landed, and built one of these villages. The moment the canoes reached the shore, the men leaped out, and at once took possession of a piece of ground, by tearing up the plants and shrubs, or sticking up some part of the framing of a hut. They then returned to their canoes, and secured their weapons, by setting them up against a tree, or placing them in such a position, that they could be laid hold of in an instant.

Besides the natives who took up their abode close to us, we were occasionally visited by others of them, whose residence was not afar off; and by some who lived more remote. Their articles of commerce were, curiosities, fish, and women. The two first always came to a good market; which the latter did not. The seamen had taken a kind of dislike to these people; and were either unwilling, or afraid, to associate with them; which produced this good effect, that I knew no instance of a man's quitting his station, to go to their habitations.

A connection with women I allow, because I cannot prevent it; but never encourage, because I always dread its consequences. I know, indeed, that many men are of opinion, that such an intercourse is one of our greatest securities amongst savages; and perhaps they, who either from necessity or choice, are to remain and settle with them, may find it so. But with travellers and transient visitors, such as we were, it is generally otherwise; and in our situation, a connection with their women betrays more men than it saves. What else can be reasonably expected, since all their views are selfish, without the least mixture of regard or attachment? My own experience, at least, which hath been pretty extensive, hath not pointed out to me one instance to the contrary.

Amongst our occasional visitors, was a chief named Kahoora, who, as I was informed, headed the party that cut off Captain Furneaux's people, and himself killed Mr. Rowe,  
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the officer who commanded. To judge of the character of Kahoora, by what I had heard from many of his countrymen, he seemed to be more feared than beloved amongst them. Not satisfied with telling me that he was a very bad man, some of them even importuned me to kill him: and, I believe, they were not a little surprised that I did not listen to them; for, according to their ideas of equity, this ought to have been done. But if I had followed the advice of all our pretended friends, I might have extirpated the whole race; for the people of each hamlet or village, by turns, applied to me to destroy the other.

On the 16th, at day-break, I set out with a party of men, in five boats, to collect food for our cattle. Captain Clerke, and several of the officers, Omai, and two of the natives, accompanied me. We proceeded about three leagues up the sound, and then landed on the east side, at a place where I had formerly been. Here we cut as much grass as loaded the two launches.

As we returned down the sound, we visited Grays Cove, the memorable scene of the massacre of Captain Furneaux's people. Here I met with my old friend Pedro, who was almost continually with me the last time I was in the Sound, and is mentioned in my history of that voyage. He, and another of his countrymen, received us on the beach, armed with the pa-too and spear. Whether this form of reception was a mark of their courtesy, or of their fear, I cannot say; but I thought they betrayed manifest signs of the latter. However, if they had any apprehensions, a few presents soon removed them, and brought down to the beach two or three more of the family; but the greatest part of them remained out of sight.

Whilst we were at this place, our curiosity prompted us to enquire into the circumstances attending the melancholy fate of our countrymen\*; and Omai was made use of as our interpreter for this purpose. Pedro, and the rest of the natives present, answered all the questions that were put to them on the subject without reserve, and like men who are under no dread of punishment for a crime of which they are not guilty. For we already knew that none of them had been concerned in the unhappy transaction. They told us, that while our people were sitting at dinner, surrounded by several of the natives, some of the latter stole, or snatched from them, some bread and fish, for which they were beat. This being resented, a quarrel ensued, and two New Zealanders were shot dead, by the only two muskets that were fired. For before our people had time to discharge a third, or to load again those that had been fired, the natives rushed in upon them, overpowered them with their numbers, and put them all to death. Pedro and his companions, besides relating the history of the massacre, made us acquainted with the very spot that was the scene of it. It is at the corner of the cove on the right hand. They pointed to the place of the sun, to mark to us at what hour of the day it happened; and according to this, it must have been late in the afternoon. They also showed us the place where the boat lay; and it appeared to be about two hundred yards distant from that where the crew were seated. One of their number, a black servant of Captain Furneaux, was left in the boat to take care of her.

We were afterwards told that this black was the cause of the quarrel, which was said to have happened thus: One of the natives stealing something out of the boat, the negro gave him a severe blow with a stick. The cries of the fellow being heard by his countrymen at a distance, they imagined he was killed, and immediately began the attack on our people; who, before they had time to reach the boat, or to arm

\* Vide Captain Cook's former Voyage.

themselves against the unexpected impending danger, fell a sacrifice to the fury of their savage assailants. What became of the boat, I never could learn. Some said she was pulled to pieces and burnt; others told us, that she was carried they knew not whither by a party of strangers.

We stayed here till the evening, when, having loaded the rest of the boats with grafs, celery, scurvy-grafs, &c. we embarked to return to the ships; where some of the boats did not arrive till one o'clock the next morning; and it was fortunate that they got on board then, for it afterwards blew a perfect storm. In the evening the gale ceased, and the wind having veered to the east, brought with it fair weather.

On the 20th, in the forenoon, we had another storm from the north-west. Though this was not of so long continuance as the former, the gusts of wind from the hills were far more violent.

By this time more than two-thirds of the inhabitants of the sound had settled themselves about us. Great numbers of them daily frequented the ships while our people were there melting some seal-blubber. No Greenlander was ever fonder of train-oil, than our friends here seemed to be. They relished the very skimmings of the kettle; but a little of the pure stinking oil was a delicious feast.

Having got on board as much hay and grafs as we judged sufficient to serve the cattle till our arrival at Otaheite, and having completed the wood and water of both ships, on the 24th we weighed anchor, and stood out of the cove.

While we were unmooring and getting under sail, many of the natives came to take their leave of us, or rather to obtain, if they could, some additional presents from us before we left them. Accordingly, I gave to Matahouah and Tomatongeaurooranuc, two of their chiefs, two pigs, a boar, and a sow. They made me a promise not to kill them; though I must own I put no great faith in this. The animals which Captain Furneaux sent on shore here, and which soon after fell into the hands of the natives, I was now told were all dead; but I was afterwards informed, that Tiratou, a chief, had a great many cocks and hens in his possession, and one of the sows.

We had not been long at anchor near Motuara, before three or four canoes, filled with natives, came off to us from the south-east side of the sound; and a brisk trade was carried on with them for the curiosities of this place. In one of these canoes was Kahoora, leader of the party who cut off the crew of the Adventure's boat. This was the third time he had visited us, without betraying the smallest appearance of fear. I was ashore when he now arrived, but had got on board just as he was going away. Omai, who had returned with me, presently pointed him out, and solicited me to shoot him. Not satisfied with this, he addressed himself to Kahoora, threatening to be his executioner, if ever he presumed to visit us again.

The New Zealander paid so little regard to these threats, that he returned, the next morning, with his whole family, men, women, and children, to the number of twenty and upwards. Omai was the first who acquainted me with his being alongside the ship, and desired to know if he should ask him to come on board. I told him he might; and accordingly he introduced the chief into the cabin, saying, "There is Kahoora; kill him!" But, as if he had forgot his former threats, or was afraid that I should call upon him to perform them, he immediately retired. In a short time, however, he returned; and seeing the chief unhurt, he expostulated with me very earnestly, saying, "Why do you not kill him? You tell me, if a man kills another in England, that he is hanged for it. This man has killed ten, and yet you will not kill him, though many of his countrymen desire it, and it would be very good." Omai's arguments, though specious enough, having no weight with me, I desired him

to ask the chief, why he had killed Captain Furneaux's people? At this question, Kahoora folded his arms, hung down his head, and looked like one caught in a trap; and, I firmly believe, he expected instant death. But no sooner was he assured of his safety, than he became cheerful. He did not, however, seem willing to give me an answer to the question that had been put to him, till I had, again and again, repeated my promise that he should not be hurt. Then he ventured to tell us, that one of his countrymen having brought a stone hatchet to barter, the man to whom it was offered took it, and would neither return it, nor give any thing for it: on which the owner of it snatched up the bread as an equivalent; and then the quarrel began.

For some time before we arrived at New Zealand, Omai had expressed a desire to take one of the natives with him to his own country. We had not been there many days, before he had an opportunity of being gratified in this; for a youth about seventeen or eighteen years of age, named Taweharooa, offered to accompany him. Finding that he was fixed in his resolution to go with us, and having learnt that he was the only son of a deceased chief, I told his mother that, in all probability, he would never return, but this made no impression on either; for when she returned the next morning, to take her last farewell of him, all the time she was on board she remained quite cheerful, and went away wholly unconcerned. Another youth, about ten years of age, accompanied him as a servant, named Kokoa; he was presented to me by his own father, who stripped him, and left him naked as he was born; indeed he seemed to part with him with perfect indifference.

From my own observations, and from the information of Taweharooa and others, it appears to me that the New Zealanders must live under perpetual apprehensions of being destroyed by each other: there being few of their tribes that have not, as they think, sustained wrongs from some other tribe, which they are continually upon the watch to revenge. And, perhaps, the desire of a good meal may be no small incitement. Their method of executing their horrible designs is, by stealing upon the adverse party in the night; and if they find them unguarded they kill all indiscriminately; not even sparing the women and children. When the massacre is completed, they either feast themselves on the spot, or carry off as many of the dead bodies as they can, and devour them at home, with acts of brutality too shocking to be described. One hardly ever finds a New Zealander off his guard, either by night or by day; indeed, no other man can have such powerful motives to be vigilant, as the preservation both of body and of soul depends upon it. For, according to their system of belief, the soul of the man whose flesh is devoured by the enemy, is doomed to a perpetual fire, whilst the soul of the man whose body has been rescued from those who killed him, as well as the souls of all who die a natural death, ascend to the habitations of the gods.

Polygamy is allowed amongst these people; and it is not uncommon for a man to have two or three wives. The women are marriageable at a very early age; and it should seem, that one who is unmarried, is but in a forlorn state. She can with difficulty get a subsistence; at least, she is, in a great measure, without a protector, though in constant want of a powerful one.

No people can have a quicker sense of an injury done to them, and none are more ready to resent it. But, at the same time, they will take an opportunity of being insolent when they think there is no danger of punishment.

Their public contentions are frequent, or rather perpetual; for it appears, from their number of weapons, and dexterity in using them, that war is their principal profession. Before they begin the onset, they join in a war-song, to which they all keep the exactest

exactest time, and soon raise their passion to a degree of frantic fury, attended with the most horrid distortion of their eyes, mouths, and tongues, to strike terror into their enemies; which, to those who have not been accustomed to such a practice, makes them appear more like demons than men, and would almost chill the boldest with fear. To this succeeds a circumstance, almost foretold in their fierce demeanour, horrid, cruel, and disgraceful to human nature; which is, cutting in pieces, even before being perfectly dead, the bodies of their enemies, and, after dressing them on a fire, devouring the flesh, not only without reluctance, but with peculiar satisfaction.

## PART II.

*From leaving New Zealand in February 1777, to their Arrival at Otaheite in July following.*

ON the 25th of February we sailed from New Zealand, and had no sooner lost sight of the land than our two young adventurers repented heartily of the step they had taken. All the soothing encouragement we could think of availed but little. They wept both in public and in private; and made their lamentations in a kind of song, which was expressive of their praises of their country. Thus they continued for many days, but at length their native country and their friends were forgot, and they appeared to be as firmly attached to us, as if they had been born amongst us.

On the 29th of March, at ten in the morning, as we were standing to the north-east, the Discovery made the signal of seeing land. We saw it from the mast-head almost the same moment, bearing north-east-by-east. We soon discovered it to be an island of no great extent.

We presently found it was inhabited, and saw several people, on a point of the land we had passed, wading to the reef, where, as they found the ship leaving them quickly, they remained. But others who soon appeared in different parts, followed her course; and sometimes several of them collected into small bodies, who made a shouting noise all together, nearly after the manner of the inhabitants of New Zealand.

Between seven and eight o'clock, we were at the west-north-west part of the island, and, being near the shore, we could perceive with our glasses that several of the natives were armed with long spears and clubs, which they brandished in the air with signs of threatening, or, as some on board interpreted their attitudes, with invitations to land. Most of them appeared naked, except having a sort of girdle, which, being brought up between the thighs, covered that part of the body. But some of them had pieces of cloth of different colours, white, striped, or chequered, which they wore as a garment thrown about their shoulders; and almost all of them had a white wrapper about their heads, not much unlike a turban. They were of a tawny colour, and of a middling stature.

At this time a small canoe was launched in a great hurry from the further end of the beach, and a man getting into it, put off, as with a view to reach the ship. On perceiving this, I brought-to, that we might receive the visit; but the man's resolution failing, he soon returned toward the beach, where, after some time, another man joined him in the canoe, and then they both paddled towards us. They stopped short, however, as if afraid to approach, until Omai, who addressed them in the Otaheitean language, in some measure quieted their apprehensions. They then came near enough to take some beads and nails, which were tied to a piece of wood, and, thrown into the



canoe. They seemed afraid to touch these things, and put the piece of wood aside without untying them. This, however, might arise from superstition; for Omai told us, that when they saw us offering them presents, they asked something for their Eatooa, or god. He also, perhaps improperly, put the question to them, Whether they ever eat human flesh? which they answered in the negative, with a mixture of indignation and abhorrence. One of them, whose name was Mourooa, being asked how he came by a scar on his forehead, told us, that it was the consequence of a wound he had got in fighting with the people of an island, which lies to the north-eastward, who sometimes came to invade them. They afterward took hold of a rope. Still, however, they would not venture on board; but told Omai, who understood them pretty well, that their countrymen on shore had given them this caution, at the same time directing them to inquire, from whence our ship came, and to learn the name of the captain. On our part, we inquired the name of the island, which they called Mangya or Mangeea; and sometimes added to it Nooc, nai, naiwa. The name of their chief, they said, was Orooaeeeka.

Mourooa was lusty and well made, but not very tall. His features were agreeable, and his disposition seemingly no less so; for he made several droll gesticulations, which indicated both good-nature and a share of humour. He also made others which seemed of a serious kind, and repeated some words with a devout air, before he ventured to lay hold of the rope at the ship's stern; which was probably to recommend himself to the protection of some divinity. His colour was nearly of the same cast with that common to the most southern Europeans. The other man was not so handsome. Both of them had strong, straight hair, of a jet colour, tied together on the crown of the head with a bit of cloth. They wore such girdles as we had perceived about those on shore, and we found they were a substance made from the *morus papyrifera*, in the same manner as at the other islands of this ocean. It was glazed like the sort used by the natives of the Friendly islands; but the cloth on their heads was white, like that which was found at Otaheite. They had on a kind of sandals, made of a grassy substance interwoven, which we also observed were worn by those who stood upon the beach; and, as we supposed, intended to defend their feet against the rough coral rock. Their beards were long, and the inside of their arms, from the shoulder to the elbow, and some other parts, were punctured or tattooed, after the manner of the inhabitants of almost all the other islands in the South-Sea. The lobe of their ears was pierced, or rather slit, and to such a length, that one of them stuck there a knife and some beads, which he had received from us; and the same person had two polished pearl-shells, and a bunch of human hair, loosely twisted, hanging about his neck, which was the only ornament we observed. The canoe they came in (which was the only one we saw) was not above ten feet long, and very narrow; but both strong and neatly made. The fore-part had a flat board fastened over it, and projecting out, to prevent the sea getting in on plunging, like the small evaas at Otaheite; but it had an upright stern, about five feet high, like some in New Zealand; and the upper end of this stern-post was forked. The lower part of the canoe was of a white wood; but the upper was black, and their paddles, made of wood of the same colour, not above three feet long, broad at one end, and blunted. They paddled either end of the canoe forward indifferently; and only turned about their faces to paddle the contrary way.

We now stood off and on; and as soon as the ships were in a proper station, about ten o'clock I ordered two boats, one of them from the *Discovery*, to sound the coast, and to endeavour to find a landing-place. With this view, I went in one of them myself,

myself, taking with me such articles to give the natives as I thought might serve to gain their good-will. I had no sooner put off from the ship, than the canoe with the two men, which had not left us long before, paddled towards my boat; and having come alongside, Mourrooa stepped into her, without being asked, and without a moment's hesitation.

Omai, who was with me, was ordered to inquire of him where we could land; and he directed us to two different places. But I saw, with regret, that the attempt could not be made at either place, unless at the risk of having our boats filled with water, or even staved to pieces. Nor were we more fortunate in our search for anchorage; for we could find no bottom till within a cable's length of the breakers. There we met with from forty to twenty fathoms depth, over sharp coral rocks; so that anchoring would have been attended with much more danger than landing.

While we were thus employed in reconnoitring the shore, great numbers of the natives thronged down upon the reef, all armed as above mentioned. Mourrooa, who was now in my boat, probably thinking that this warlike appearance hindered us from landing, ordered them to retire back. As many of them complied, I judged he must be a person of some consequence among them. Indeed, if we understood him right, he was the King's brother. So great was the curiosity of several of them, that they took to the water, and swimming off to the boats, came on board them without reserve. Nay, we found it difficult to keep them out; and still more difficult to prevent them carrying off every thing they could lay their hands upon. At length, when they perceived that we were returning to the ships, they all left us, except our original visitor Mourrooa. He, though not without evident signs of fear, kept his place in my boat, and accompanied me on board the ship.

The cattle, and other new objects, that presented themselves to him there, did not strike him with so much surprise as one might have expected. Perhaps his mind was too much taken up about his own safety, to allow him to attend to other things. It is certain, that he seemed very uneasy; and the ship, on our getting on board, happening to be standing off shore, this circumstance made him the more so. I could get but little new information from him; and therefore, after he had made a short stay, I ordered a boat to carry him in toward the land. As soon as he got out of the cabin, he happened to stumble over one of the goats. His curiosity now overcoming his fear, he stopped, looked at it, and asked Omai, what bird this was? and not receiving an immediate answer from him, he repeated the question to some of the people upon deck. The boat having conveyed him pretty near to the surf, he leaped into the sea, and swam ashore. He had no sooner landed, than the multitude of his countrymen gathered round him, as if with an eager curiosity to learn from him what he had seen; and in this situation they remained, when we lost sight of them. As soon as the boat returned, we hoisted her in, and made sail from the land to the northward.

Thus were we obliged to leave, unvisited, this fine island, which seemed capable of supplying all our wants.

As the inhabitants seemed to be both numerous and well fed, such articles of provision as the island produces must be in great plenty. It might, however, be a matter of curiosity to know, particularly, their method of subsistence; for our friend Mourrooa told us, that they had no animals, as hogs and dogs, both which, however, they had heard of; but acknowledged they had plantains, bread-fruit, and taro. The only birds we saw, were some white egg-birds, terns, and noddies; and one white heron, on the shore.

After leaving Mangeea, on the afternoon of the 30th, we continued our course northward all that night, and till noon on the 31st; when we again saw land, in the direction of north-east-by-north, distant eight or ten leagues; and next morning, at eight o'clock, we got abreast of its north end. I sent two armed boats from the *Resolution*, and one from the *Discovery*, under the command of Lieutenant Gore, to look for anchoring-ground, and a landing-place. In the mean time, we plyed up under the island with the ships.

Just as the boats were putting off, we observed several single canoes coming from the shore. They went first to the *Discovery*, she being the nearest ship. It was not long after, when three of the canoes came alongside of the *Resolution*, each conducted by one man. They are long and narrow, and supported by outriggers. The stern is elevated about three or four feet, something like a ship's stern-post. The head is flat above, but prow-like below, and turns down at the extremity, like the end of a violin. Some knives, beads, and other trifles, were conveyed to our visitors; and they gave us a few cocoa-nuts, upon our asking for them. But they did not part with them by way of exchange for what they had received from us. For they seemed to have no idea of bartering; nor did they appear to estimate any of our presents at a high rate.

With a little persuasion, one of them made his canoe fast to the ship, and came on board; and the other two, encouraged by his example, soon followed him. Their whole behaviour marked that they were quite at their ease, and felt no sort of apprehension of our detaining or using them ill.

After their departure another canoe arrived, conducted by a man who brought a bunch of plantains as a present to me; asking for me by name having learnt it from Omai, who was sent before us in a boat with Mr. Gore. In return for this civility, I gave him an axe, and a piece of red cloth; and he paddled back to the shore well satisfied. I afterwards understood from Omai, that this present had been sent from the King, or principal chief of the island.

Not long after a double canoe, in which were twelve men, came towards us. As they drew near the ship, they recited some words in concert, by way of chorus, one of their number first standing up, and giving the word before each repetition. When they had finished their solemn chant, they came alongside and asked for the chief. As soon as I shewed myself, a pig and a few cocoa-nuts were conveyed up into the ship; and the principal person in the canoe made me an additional present of a piece of matting, as soon as he and his companions got on board.

Our visitors were conducted into the cabin, and to other parts of the ship. Some objects seemed to strike them with a degree of surprise; but nothing fixed their attention for a moment. They were afraid to come near the cows and horses; nor did they form the least conception of their nature. But the sheep and goats did not surpass the limits of their ideas; for they gave us to understand, that they knew them to be birds. It will appear rather incredible, that human ignorance could ever make so strange a mistake; there not being the most distant similitude between a sheep or a goat and any winged animal. I made a present to my new friend of what I thought might be most acceptable to him; but, on his going away, he seemed rather disappointed than pleased. I afterward understood that he was very desirous of obtaining a dog, of which animal this island could not boast.

The people in these canoes were in general of a middling size, and not unlike those of Mangeea; though several were of a blacker cast than any we saw there. Their hair was tied on the crown of the head, or flowing loose about the shoulders; and though

in some it was of a frizzling disposition, yet, for the most part, that, as well as the straight fort, was long. Their features were various, and some of the young men rather handsome. Like those of Mangeea, they had girdles of glazed cloth, or fine matting, the ends of which, being brought betwixt their thighs, cover the adjoining parts. Ornaments, composed of a sort of broad brags, stained with red, and strung with berries of the night-shade, were worn about their necks. Their ears were bored, but not slit; and they were punctured upon their legs, from the knee to the heel, which made them appear as if they wore a kind of boots. They also resembled the inhabitants of Mangeea in the length of their beards, and, like them, wore a sort of sandals upon their feet. Their behaviour was frank and cheerful, with a great deal of good-nature.

Soon after day-break, we observed some canoes coming off to the ships, and one of them directed its course to the Resolution. In it was a hog, with some plantains and cocoa-nuts, for which the people who brought them demanded a dog from us, and refused every other thing that we offered in exchange. To gratify these people, Omai parted with a favourite dog he had brought from England; and with this acquisition they departed highly satisfied.

I dispatched Mr. Gore with three boats, two from the Resolution, and one from the Discovery. Two of the natives, who had been on board, accompanied him, and Omai went with him in his boat as an interpreter. The ships being a full league from the island when the boats put off, it was noon before we could work up to it. We then saw our three boats riding at their grapplings, just without the surf, and a prodigious number of the natives on the shore, abreast of them. By this we concluded, that Mr. Gore, and others of our people, had landed, and our impatience to know the event may be easily conceived. In order to observe their motions, and to be ready to give them such assistance as they might want, and our respective situations would admit of, I kept as near the shore as was prudent. Some of the islanders, now and then, came off to the ships in their canoes, with a few cocoa-nuts, which they exchanged for whatever was offered to them.

These occasional visits served to lessen my solicitude about our people who had landed. Though we could get no information from our visitors; yet their venturing on board seemed to imply, at least, that their countrymen on shore had not made an improper use of the confidence put in them. At length, a little before sun-set, we had the satisfaction of seeing the boats put off. When they got on board, I found that Mr. Gore himself, Omai, Mr. Anderson, and Mr. Burney, were the only persons who had landed. The transactions of the day were now fully reported to me by Mr. Anderson: I shall give them nearly in his words.

“ We rowed toward a small sandy beach, upon which a great number of the natives had assembled. Several of the natives swam off, bringing cocoa-nuts; and Omai, with their countrymen, whom we had with us in the boats, made them sensible of our wish to land.

“ Mr. Burney, the first lieutenant of the Discovery, and I, went in one canoe, a little time before the other; and our conductors, watching attentively the motions of the surf, landed us safely upon the reef. An islander took hold of each of us, obviously with an intention to support us in walking over the rugged rocks to the beach, where several of the others met us, holding the green boughs of a species of mimosa in their hands, and saluted us by applying their noses to ours.

“ We were conducted from the beach amidst a crowd of people, who flocked with very eager curiosity to look at us, and would have prevented our proceeding, had not  
 some

some men, who seemed to have authority, dealt blows, with little distinction, amongst them, to keep them off. We were then led up an avenue of cocoa-palms; and soon came to a number of men, arranged in two rows, armed with clubs. After walking a little way amongst these, we found a person who seemed a chief, sitting on the ground cross-legged, cooling himself with a sort of triangular fan made from a leaf of the cocoa-palm. In his ears were large bunches of beautiful red feathers; but he had no other mark to distinguish him from the rest of the people, though they all obeyed him.

"We proceeded still amongst the men armed with clubs, and came to a second chief, who sat fanning himself, and ornamented as the first. In the same manner we were conducted to a third chief, who seemed older than the two former. He also was sitting, and adorned with red feathers; and after saluting him as we had done the others, he desired us both to sit down; which we were very willing to do, being pretty well fatigued.

"In a few minutes, we saw, at a small distance, about twenty young women, ornamented as the chiefs, with red feathers, engaged in a dance, which they performed to a slow and serious air, sung by them all. We got up, and went forward to see them; and though we must have been strange objects to them, they continued their dance, without paying the least attention to us. Their motions and song were performed in exact concert. In general, they were rather stout than slender, with black hair flowing in ringlets down the neck, and of an olive complexion. Their eyes were of a deep black, and each countenance expressed a degree of complacency and modesty, peculiar to the sex in every part of the world; but perhaps more conspicuous here, where nature presented us with her productions in the fullest perfection, unbiassed in sentiment by custom, or unrestrained in manner by art. Their shape and limbs were elegantly formed; for as their dress consisted only of a piece of glazed cloth fastened about the waist, and scarcely reaching so low as the knees, in many we had an opportunity of observing every part.

"As we supposed the ceremony of being introduced to the chiefs was at an end, we began to look about for Mr. Gore and Omai; and though the crowd would hardly suffer us to move, we at length found them coming up, as much incommoded by the number of people as we had been, and introduced in the same manner to the three chiefs, whose names were Otteroo, Taroa, and Fatouweera. Omai mentioned to them our views in coming on shore, when he was told we must wait till next day.

"They now seemed to take some pains to separate us from each other; every one of us having his circle, to surround and gaze at him: and when I told the chief with whom I sat, that I wanted to speak to Omai, he peremptorily refused my request. At the same time I found the people began to steal several trilling things which I had in my pocket; and when I took the liberty of complaining to the chief of this treatment, he justified it. From these circumstances, I now entertained apprehensions that they might have formed the design of detaining us amongst them.

"Mr. Burney happening to come to the place where I was, I mentioned my suspicions to him; and, to put it to the test, whether they were well founded, we attempted to get to the beach. But we were stopped, when about half way, by some men, who told us that we must go back to the place which we had left. On coming up, we found Omai entertaining the same apprehensions. But he had, as he fancied, an additional reason for being afraid; for he had observed, that they had dug a hole in the ground for an oven, which they were now heating; and he could assign no other reason for this, than that they meant to roast and eat us, as is practised by the inhabitants

inhabitants of New Zealand. Nay, he went so far as to ask them the question ; at which they were greatly surprized, asking, in return, whether that was a custom with us ?

“ In this manner we were detained the greatest part of the day, being sometimes together and sometimes separated, but always in a crowd ; who, not satisfied with gazing at us, frequently desired us to uncover parts of our skin ; the sight of which commonly produced a general murmur of admiration. At the same time, they did not omit these opportunities of rifling our pockets ; and at last, one of them snatched a small bayonet from Mr. Gore, which hung in its sheath by his side.

“ Upon our urging again the business we came upon, they gave us to understand, that we must stay and eat with them ; and a pig which we saw soon after, lying near the oven, which they had prepared and heated, removed Omai's apprehensions of being put into it himself ; and made us think it might be intended for our repast. The chief also promised to send some people to procure food for the cattle ; but it was not till pretty late in the afternoon that we saw them return with a few plantain-trees, which they carried to our boats. A piece of the young hog that had been dressed, was set before us, of which we were desired to eat. Our appetites, however, had failed, from the fatigue of the day ; and though we did eat a little to please them, it was without satisfaction to ourselves.

“ It being now near sunset, we told them it was time to go on board. This they allowed ; and sent down to the beach the remainder of the victuals that had been dressed, to be carried with us to the ships. They put us on board our boats, with the cocoa-nuts, plantains, and other provisions, which they had brought ; and we rowed to the ships, very well pleased that we had at last got out of the hands of our troublesome masters.

“ We regretted much, that our restrained situation gave us so little opportunity of making observations on the country. For, during the whole day, we were seldom a hundred yards from the place where we were introduced to the chiefs, on landing ; and, consequently, were confined to the surrounding objects. The first thing that presented itself, worthy of our notice, was the number of people ; which must have been, at least, two thousand. For those who welcomed us on the shore, bore no proportion to the multitude we found amongst the trees, on proceeding a little way up.

“ We could also observe, that, except a few, those we had hitherto seen on board, were of the lower class. For a great number of those we now met with, had a superior dignity in their air, and were of a much whiter cast. In general, they had their hair tied on the crown of the head, long, black, and of a most luxuriant growth. Many of the young men were perfect models in shape, of a complexion as delicate as that of the women, and to appearance, of a disposition as amiable.

“ The wife of one of the chiefs appeared with her child, laid in a piece of red cloth, which had been presented to her husband ; and seemed to carry it with great tenderness, suckling it much after the manner of our women. Another chief introduced his daughter, who was young and beautiful ; but appeared with all the timidity natural to the sex ; though she gazed on us with a kind of anxious concern, that seemed to struggle with her fear, and to express her astonishment at so unusual a sight. Others advanced with a firmness, and, indeed, were less reserved than we expected ; but behaved with a becoming modesty. We did not observe any personal deformities amongst either sex ; except in a few who had scars of broad superficial ulcers remaining on the face and other parts.



"About a third part of the men were armed with clubs and spears; and probably, these were only the persons who had come from a distance, as many of them had small baskets, mats, and other things, fastened to the ends of their weapons. The clubs were generally about six feet long, made of hard black wood, lance-shaped at the end, but much broader, with the edge nicely scolloped, and the whole neatly polished.

"What the soil of the island may be, farther inland, we could not tell. But, toward the sea, it is nothing more than a bank of coral, ten or twelve feet high, steep, and rugged; except where there are small sandy beaches, at some clefts where the ascent is gradual. The coral, though it has, probably, been exposed to the weather for many centuries, has undergone no farther change than becoming black on the surface; which, from its irregularity, is not much unlike large masses of a burnt substance. But on breaking some pieces off, we found that, at the depth of two or three inches, it was just as fresh as the pieces that had been lately thrown upon the beach by the waves. The reef or rock, that lines the shore entirely, runs to different breadths into the sea, where it ends all at once, and becomes like a high steep wall. It is nearly even with the surface of the water, and of a brown or brick colour; but the texture is rather porous, yet sufficient to withstand the washing of the surf which continually breaks upon it."

Though the landing of our gentlemen proved the means of enriching my journal with the foregoing particulars, the principal object I had in view was, in a great measure, unattained; for the day was spent without getting any one thing from the island worth mentioning. The natives, however, were gratified with a sight they never before had; and, probably, will never have again. And mere curiosity seems to have been the chief motive for keeping the gentlemen under such restraint, and for using every art to prolong their continuance amongst them.

Omai was Mr. Gore's interpreter, but that was not the only service he performed this day. He was asked by the natives a great many questions concerning us, our ships, our country, and the sort of arms we used; and according to the account he gave me, his answers were not a little upon the marvellous. As, for instance, he told them, that our country had ships as large as their island; on board which were instruments of war, (describing our guns) of such dimensions, that several people might sit within them; and that one of them was sufficient to crush the whole island at one shot. This led them to enquire of him, what sort of guns we actually had in our two ships. He said, that though they were but small, in comparison with those he had just described, yet, with such as they were, we could with the greatest ease, and at the distance the ships were from the shore, destroy the island, and kill every soul in it. They persevered in their inquiries to know by what means this could be done? and Omai explained the matter as well as he could. He happened luckily to have a few cartridges in his pocket: these he produced; the balls, and the gunpowder which was to set them in motion, were submitted to inspection; and, to supply the defects of his description, an appeal was made to the senses of the spectators. It has been mentioned above, that one of the chiefs had ordered the multitude to form themselves into a circle. This furnished Omai with a convenient stage for his exhibition. In the centre of this amphitheatre, the inconsiderable quantity of gunpowder, collected from his cartridges, was properly disposed upon the ground, and, by means of a bit of burning wood from the oven, where dinner was dressing, set on fire. The sudden blast, and loud report, the mingled flame and smoke, that instantly succeeded, now filled the whole assembly with astonishment; they no longer doubted



doubted the tremendous power of our weapons, and gave full credit to all that Omai had said.

If it had not been for the terrible ideas they conceived of the guns of our ships, from this specimen of their mode of operation, it was thought that they would have detained the gentlemen all night. For Omai assured them, that if he and his companions did not return on board the same day, they might expect that I would fire upon the island. And as we stood in nearer the land in the evening, than we had done any time before, of which position of the ships they were observed to take great notice, they, probably, thought we were meditating this formidable attack; and, therefore, suffered their guests to depart; under the expectation, however, of seeing them again on shore next morning. But I was too sensible of the risk they had already run, to think of a repetition of the experiment.

Omai found three of his countrymen here; their story is an affecting one, as related by him. About twenty persons had embarked on board a canoe at Otaheite, to cross over to the neighbouring island Ulietea. A violent contrary wind arising, they could neither reach the latter, nor get back to the former. Their intended passage being a very short one, their stock of provisions was scanty, and soon exhausted. The hardships they suffered, while driven along by the storm, are not to be conceived. They passed many days without sustenance. Their numbers gradually diminished, worn out by famine and fatigue. Four only survived, when the canoe overfet. However, they kept hanging by the side of the vessel, till Providence brought them in sight of the people of this island, who immediately sent out canoes, and brought them ashore. Of the four, one was since dead. The other three still living, spoke highly of the kind treatment they here met with. And so well satisfied were they with their situation, that they refused the offer made to them by our gentlemen, at Omai's request, of giving them a passage on board our ships, to restore them to their native islands.

The landing of our gentlemen on this island, though they failed in the object of it, cannot but be considered as a very fortunate circumstance. It has proved, as we have seen, the means of bringing to our knowledge a matter of fact, not only very curious, but very instructive. The application of the above narrative is obvious. It will serve to explain, better than a thousand conjectures of speculative reasoners, how the detached parts of the earth, and in particular how the islands of the South Seas, may have been first peopled, especially those that lie remote from any inhabited continent, or from each other.

Light airs and calms having prevailed, by turns, all the night of the 3d of April, the easterly swell had carried the ships some distance from Wattecoo, before day-break. But as I had failed in my object of procuring some effectual supply, I quitted it without regret, and steered for the neighbouring island.

With gentle breeze at east, we got up with it before ten o'clock in the morning, and I immediately dispatched Mr. Gore, with two boats, to endeavour to get some food for our cattle. As there seemed to be no inhabitants here to obstruct our taking away whatever we might think proper, our boats no sooner reached the west side of the island, but they ventured in, and Mr. Gore and his party got safe on shore. I could, from the ship, see that they had succeeded so far; and I immediately sent a small boat to know what farther assistance was wanting. She did not return till three o'clock in the afternoon, having waited to take in a lading of what useful produce the island afforded. As soon as she was cleared, she was sent again for another cargo; the jolly-boat was also dispatched, and Mr. Gore was ordered to be on board, with all the boats, before night; which was complied with.

The supply obtained here, consisted of about a hundred cocoa-nuts for each ship; we also got for our cattle some grafs, and a quantity of the leaves and branches of young cocoa-trees, and of the wharra-tree, as it is called at Otaheite.

The only birds seen here were a beautiful cuckoo, of a chestnut brown, variegated with black, which was shot. And upon the shore, some egg-birds; a small sort of curlew; blue and white herons; and great numbers of noddies; which last, at this time, laid their eggs, a little further up, on the ground.

One of our people caught a lizard, of a most forbidding aspect, though small, running up a tree; and many of another sort were seen. The bushes towards the sea, were frequented by infinite numbers of a sort of moth, elegantly speckled with red, black, and white. There were also several other sorts of moths, as well as some pretty butterflies; and a few other insects.

Though there were, at this time, no fixed inhabitants upon the island, indubitable marks remained of its being, at least, occasionally frequented. In particular, a few empty huts were found. In one of them, Mr. Gore left a hatchet, and some nails, to the full value of what we took away.

As soon as the boats were hoisted in, I made sail again to the northward. Although Hervey's island, discovered in 1773, was not above fifteen leagues distant, yet we did not get sight of it till day-break in the morning. As we drew near it, at eight o'clock, we observed several canoes put off toward the ships. This was a sight that, indeed, surprised me, as no signs of inhabitants were seen when the island was first discovered; which might be owing to a pretty brisk wind that then blew, and prevented their canoes venturing out, as the ships passed to leeward; whereas now we were to windward.

As we kept on toward the island, six or seven of the canoes, all double ones, soon came near us. There were from three to six men in each of them. They stopped at the distance of about a stone's throw from the ship; and it was some time before Omai could prevail upon them to come alongside; but no entreaties could induce any of them to venture on board. Indeed, their disorderly and clamorous behaviour by no means indicated a disposition to trust us, or treat us well. We afterwards learnt, that they had attempted to take some oars out of the Discovery's boat that lay alongside, and struck a man who endeavoured to prevent them. They also cut away, with a shell, a net with meat, which hung over that ship's stern, and absolutely refused to restore it; though we afterwards purchased it of them. Those who were about our ship, behaved in the same daring manner; for they made a sort of hook, of a long stick, with which they endeavoured, openly, to rob us of several things; and, at last, actually got a frock belonging to one of our people, that was towing over-board. At the same time, they immediately shewed a knowledge of bartering, and sold some fish they had (amongst which was an extraordinary flounder, spotted like porphyry; and a cream-coloured eel, spotted with black) for small nails, of which they were immoderately fond, and called them goore. But they caught, with the greatest avidity, bits of paper, or any thing else that was thrown to them; and if what was thrown fell into the sea, they made no scruple to swim after it.

These people seemed to differ as much in person, as in disposition, from the natives of Wateoo; though the distance between the two islands is not very great. Their colour was of a deeper cast; and several had a fierce, rugged aspect, resembling the natives of New Zealand. The shell of a pear-oyster polished, hung about the neck, was the only ornamental fashion that we observed amongst them; for not one of them

them had adopted that mode of ornament, so generally prevalent amongst the natives of this ocean, of puncturing, or tatooing their bodies.

Though singular in this, we had the most unequivocal proofs of their being of the same common race. Their language approached still nearer to the dialect of Otaheite than that of Wateoo, or Mangeca. Like the inhabitants of these two islands, they inquired from whence our ships came, and whither bound; who was our chief; the number of our men on board; and even the ship's name.

Having but very little wind, it was one o'clock before we drew near the north-west part of the island; when I sent Lieutenant King, with two armed boats, to sound and reconnoitre the coast, while we stood off and on with the ships. The instant the boats were hoisted out, our visitors in the canoes, who had remained alongside all the while, bartering their little trifles, suspended their traffic, and pushing for the shore as fast as they could, came near us no more.

At three o'clock, the boats returned; and Mr. King informed me, "that there was no anchorage for the ships; and that the boats could only land on the outer edge of the reef, which lay about a quarter of a mile from the dry land. He said, that a number of the natives came down upon the reef, armed with long pikes and clubs, as if they intended to oppose his landing. And yet when he drew near enough, they threw some cocoa-nuts to our people, and invited them to come on shore; though, at the very same time, he observed that the women were very busy bringing down a fresh supply of spears and darts. But, as he had no motive to land, he did not give them an opportunity to use them."

If I had been so fortunate as to have procured a supply of water, and of grass, at any of the islands we had lately visited, it was my purpose to have stood back to the south, till I had met with a westerly wind. But the certain consequence of doing this, without such a supply, would have been the loss of all the cattle, before we could possibly reach Otaheite, without gaining one advantage, with regard to the great object of our voyage. I therefore determined to bear away for the Friendly Islands, where I was sure of meeting with abundance of every thing I wanted.

April the 7th, I steered west-by-south, with a fine breeze easterly. I proposed to proceed first to Middleburg, or Eooa; thinking, if the wind continued favourable, that we had food enough on board for the cattle, to last till we should reach that island. But, about noon, next day, those faint breezes, that had attended and retarded us so long, again returned; and I found it necessary to haul more to the north, to get into the latitude of Palmerstone's and Savage islands, discovered in 1774, during my last voyage; that if necessity required it, we might have recourse to them.

This day, in order to save our water, I ordered the still to be kept at work, from six o'clock in the morning to four in the afternoon; during which time, we procured from thirteen to sixteen gallons of fresh water. There has been lately made some improvement, as they are pleased to call it, of this machine, which, in my opinion, is much for the worse.

At length, at daybreak, in the morning of the 13th, we saw Palmerstone island, bearing west-by-south, distant about five leagues. However, we did not get up with it, till eight o'clock the next morning. I then sent four boats, three from the *Resolution*, and one from the *Discovery*, with an officer in each, to search the coast for the most convenient landing-place. For, now, we were under an absolute necessity of procuring from this island, some food for the cattle; otherwise we must have lost them.

The boats first examined the south-easternmost part, and failing there, ran down to the east, where we had the satisfaction to see them land. This place is not inhabited.

About one o'clock, one of the boats came on board, laden with scurvy-grass and young cocoa-nut trees; which, at this time, was a feast for the cattle. The same boat brought a message from Mr. Gore, informing me, that there was plenty of such produce upon the island. Before evening, I went ashore in a small boat, accompanied by Captain Clerke.

We found every body hard at work, and the landing-place to be in a small creek. Upon the bushes that front the sea, or even farther in, we found a great number of men-of-war birds, tropic birds, and two sorts of boobies, which, at this time, were laying their eggs, and so tame, that they suffered us to take them off with our hands.

At one part of the reef, which looks into, or bounds, the lake that is within, there was a large bed of coral, almost even with the surface, which afforded, perhaps, one of the most enchanting prospects that nature has any where produced. Its base was fixed to the shore, but reached so far in, that it could not be seen; so that it seemed to be suspended in the water, which deepened so suddenly, that, at the distance of a few yards, there might be seven or eight fathoms. The sea was, at this time, quite unruffled; and the sun shining bright, exposed the various sorts of coral, in the most beautiful order. But the appearance of these was still inferior to that of the multitude of fishes that glided gently along, seemingly with the most perfect security. The colours of the different sorts were the most beautiful that can be imagined; yellow, blue, red, black, &c. far exceeding any thing that art can produce.

There were no traces of inhabitants having ever been here; if we except a small piece of a canoe that was found upon the beach, which, probably, may have drifted from some other island. But what is rather extraordinary, we saw several small brown rats on this spot; a circumstance, perhaps, difficult to account for, unless we allow that they were imported in the canoe of which we saw the remains.

After the boats were laden, I returned on board, leaving Mr. Gore, with a party, to pass the night on shore, in order to be ready to go to work early the next morning.

That day was accordingly spent, as the preceding one had been, in collecting, and bringing on board, food for the cattle. Having got a sufficient supply by sunset, I ordered every body on board. But having little or no wind, I determined to wait, and to employ the next day, by endeavouring to get some cocoa-nuts for our people from the next island to leeward, where we could observe that those trees were in much greater abundance than where we had already landed.

With this view I kept standing off and on all night; and, in the morning, between eight and nine o'clock, I went with the boats to the west-side of the island, and landed with little difficulty. I immediately set the people with me to work to gather cocoa-nuts, which we found in great abundance. Omai, who was with me, caught, with a scoop-net, in a very short time, as much fish as served the whole party on shore for dinner, besides sending some to both ships. Here were also great abundance of birds, particularly men-of-war and tropic birds; so that we fared sumptuously. And it is but doing justice to Omai to say, that, in these excursions to the uninhabited islands, he was of the greatest use. For he not only caught the fish, but dressed these, and the birds we killed, in an oven with heated stones, after the fashion of his country, with a dexterity and good-humour that did him great credit.

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We found this islet near a half larger than the other, and almost entirely covered with cocoa-palms. A young turtle had been lately thrown ashore here, as it was still full of maggots. We found some scorpions, a few other insects, and a great number of fish upon the reefs. Amongst these were some large eels, beautifully spotted, which, when followed, would raise themselves out of the water, and endeavour, with an open mouth, to bite their pursuers. The other sorts were chiefly parrot-fish, snappers, and a brown spotted rock-fish, about the size of a haddock, so tame, that, instead of swimming away, it would remain fixed, and gaze at us. Had we been in absolute want, a sufficient supply might have been had; for thousands of the clams, already mentioned, stuck upon the reef, some of which weighed two or three pounds. There were, besides, some other sorts of shell-fish; particularly the large periwinkle. When the tide flowed, several sharks came in over the reef, some of which our people killed; but they rendered it rather dangerous to walk in the water at that time.

Upon the whole, we did not spend our time unprofitably at this last islet; for we got there about twelve hundred cocoa-nuts, which were equally divided amongst the whole crew.

The nine or ten low islets, comprehended under the name of Palmerston's island, may be reckoned the heads or summits of the reef of coral rock, that connects them together, covered only with a thin coat of sand, yet clothed, as already observed, with trees and plants, most of which are of the same sorts that are found on the low grounds of the high islands of this ocean.

The heat, which had been great for about a month, became now much more disagreeable in this close rainy weather; and, from the moisture attending it, threatened soon to be noxious; as the ships could not be kept dry, nor the skuttles open for the sea. However, it is remarkable enough, that though the only refreshment we had received since leaving the Cape of Good Hope, was that at New Zealand; there was not, yet, a single person on board sick, from the constant use of salt food, or vicissitude of climate.

In the night between the 24th and 25th we passed Savage island, which I had discovered in 1774. I steered for the south, and then hauled up for Annamooka. The weather being squally, with rain, I anchored, at the approach of night, in fifteen fathoms water, over a bottom of coral-sand and shells; Komango bearing north-west, about two leagues distant.

Soon after we anchored, two canoes, the one with four, and the other with three men, paddled towards us, and came alongside without the least hesitation. They brought some cocoa-nuts, bread-fruit plantains, and sugar-cane, which they bartered with us for nails.

Next morning, at four o'clock, I sent Lieutenant King, with two boats, to Komango, to procure refreshments; and at five, made the signal to weigh, in order to ply up to Annamooka, the wind being unfavourable at north-west.

It was no sooner day-light, than we were visited by six or seven canoes from different islands, bringing with them, besides fruits and roots, two pigs, several fowls, some large wood-pigeons, small rails, and large violet-coloured coots. All these they exchanged with us for beads, nails, hatches, &c. They had also other articles of commerce, such as pieces of their cloth, fish-hooks, small baskets, musical reeds, and some clubs, spears, and bows. But I ordered that no curiosities should be purchased, till the ships should be supplied with provisions, and leave given for that purpose. Knowing, also, from experience, that, if all our people might trade with the natives, according to their own caprice, perpetual quarrels would ensue, I ordered that parti-

cular persons should manage the traffic both on board and on shore, prohibiting all others to interfere. Before mid-day, Mr. King's boat returned with seven hogs, some fowls, a quantity of fruit and roots for ourselves, and some grals for the cattle. His party was very civilly treated at Komango. The inhabitants did not seem to be numerous; and their huts, which stood close to each other, within a plantain walk, were but indifferent. Not far from them was a pretty large pond of fresh water, tolerably good; but there was not any appearance of a stream. With Mr. King came on board the chief of the island, named Tooboulangee; and another whose name was Taipa. They brought with them a hog, as a present to me, and promised more the next day.

Tooboulangee and Taipa kept their promise, and brought off to me some hogs. Several others were also procured by bartering, from different canoes that followed us; and as much fruit as we could well manage.

At four o'clock next morning, I ordered a boat to be hoisted out, and sent the master to sound the south-west side of Annamooka. For his report I determined to anchor on the north-side of the island, where, during my last voyage, I had found a place fit both for watering and landing; we reached it that afternoon.

Thus I resumed the very same station which I had occupied when I visited Annamooka three years before; and probably, almost in the same place where Tatman, the first discoverer of this, and some of the neighbouring islands, anchored in 1643.

The following day I went ashore, accompanied by Captain Clerke. Toobou, the chief of the island, conducted me and Omai to his house. We found it situated on a pleasant spot, in the centre of his plantation. A fine grass-plot surrounded it, which, he gave us to understand, was for the purpose of cleaning their feet, before they went within doors. I had not, before, observed such an instance of attention to cleanliness at any of the places I had visited in this ocean. While we were on shore, we procured a few hogs, and some fruit, by bartering; and, before we got on board again, the ships were crowded with the natives. Few of them coming empty-handed, every necessary refreshment was now in the greatest plenty.

I landed again in the afternoon, with a party of marines; and, at the same time, the horses, and such of the cattle as were in a weakly state, were sent on shore. Every thing being settled to my satisfaction, I returned to the ship at sunset, leaving the command upon the island to Mr. King. Taipa, who was now become our fast friend, and who seemed to be the only active person about us, in order to be near our party in the night, as well as the day, had a house brought, on men's shoulders, a full quarter of a mile, and placed close by the shed which our party occupied.

Next day, May 3d, our various operations on shore began. Some were employed in making hay for cattle; others in filling our water-casks at the neighbouring stagnant pool; and a third party in cutting wood. In the evening, before the natives retired from our post, Taipa harangued them for some time. We could only guess at the subject; and judged, that he was instructing them how to behave towards us, and encouraging them to bring the produce of the island to market. We experienced the good effects of his eloquence in the plentiful supply of provisions which, next day, we received.

Nothing worth notice happened on the 4th and 5th, except that, on the former of these days, the *Resolution* lost her small bower anchor, the cable being cut in two by the rocks. This misfortune made it necessary to examine the cables of the *Resolution*, which were found to be unhurt.

On the 6th, we were visited by a great chief from Tongataboo, whose name was Feenou, and whom Taipa was pleased to introduce to us as King of all the Friendly isles. All the natives paid their obeisance to him, by bowing their heads as low as his feet, the sole of which they also touched with each hand, first with the palm, and then with the back part. There could be little room to suspect that a person received with so much respect, could be any thing less than the King.

In the afternoon, I went to pay this great man a visit, having first received a present of two fish from him, brought on board by one of his servants. As soon as I landed, he came up to me. He appeared to be about thirty years of age, tall, but thin, and had more of the European features than any I had yet seen here. After a short stay, our new visitor and five or six of his attendants, accompanied me on board. I gave suitable presents to them all, and entertained them in such a manner, as I thought would be most agreeable.

In the evening I attended them on shore in my boat, into which the chief ordered three hogs to be put, as a return for the presents he had received from me.

The Discovery having found again her small bower anchor, shifted her birth on the 7th; but not before her best bower cable had shared the fate of the other. This day, I had the company of Feenou at dinner; and also the next day, when he was attended by Taipa, Toobou, and some other chiefs. It was remarkable, that none but Taipa was allowed to sit at table with him, or even to eat in his presence. I own that I considered Feenou as a very convenient guest, on account of this etiquette. For, before his arrival, I had generally a larger company than I could well find room for.

The first day of our arrival at Annamooka, one of the natives had stolen, out of the ship, a large junk axe. I now applied to Feenou to exert his authority to get it restored to me; and so implicitly was he obeyed, that it was brought on board while we were at dinner. These people gave us very frequent opportunities of remarking what expert thieves they were. Even some of the chiefs did not think this profession beneath them. On the 9th, one of them was detected carrying out of the ship, concealed under his clothes, the bolt belonging to the spun yarn winch; for which I sentenced him to receive a dozen lashes, and kept him confined till he paid a hog for his liberty. After this, we were not troubled with thieves of rank. Their servants, or slaves, however, were still employed in this dirty work; and upon them a flogging seemed to make no greater impression than it would have done upon the main-mast. When any of them happened to be caught in the act, their masters, far from interceding for them, would often advise us to kill them. As this was a punishment we did not chuse to inflict, they generally escaped without any punishment at all; for they appeared to us to be equally insensible of the shame and of the pain of corporal chastisement. Captain Clerke, at last, hit upon a mode of treatment, which, we thought, had some effect. He put them under the hands of the barber, and completely shaved their heads; thus pointing them out as objects of ridicule to their countrymen, and enabling our people to deprive them of future opportunities for a repetition of their rogueries, by keeping them at a distance.

Finding that we had quite exhausted the island of almost every article of food that it afforded, I employed the 11th in moving off, from the shore, the horses, observatories, and other things that we had landed, as also the party of marines who had mounted guard at our station, intending to sail as soon as the Discovery should have recovered her best bower anchor. Feenou, understanding that I meant to proceed directly to Tongataboo, importuned me strongly to alter this plan, to which he expressed



as much aversion as if he had some particular interest to promote by diverting me from it. In preference to it, he warmly recommended an island, or rather a group of islands, called Hapaec, lying to the north-east. There, he assured us, we could be supplied plentifully with every refreshment, in the easiest manner; and, to add weight to his advice, he engaged to attend us thither in person. He carried his point with me; and Hapaec was made choice of for our next station. As it had never been visited by any European ships, the examination of it became an object with me.

The 12th and the 13th, were spent in attempting the recovery of Captain Clerke's anchor, which, after much trouble, was happily accomplished; and on the 14th, in the morning, we got under sail, and left Annamooka.

This island is somewhat higher than the other small isles that surround it; but, still it cannot be admitted to the rank of those of a moderate height, such as Mangcea and Wateoo.

Besides walking frequently up into the country, which we were permitted to do without interruption, we sometimes amused ourselves in shooting wild ducks, not unlike the widgeon, which are very numerous upon the salt lake, and the pool where we got our water.

To the north and north-east of Annamooka, and in the direct track to Hapaec, whither we were now bound, the sea is sprinkled with a great number of small isles.

At four o'clock in the afternoon being the length of Kotoo, the westernmost of the above cluster of small islands, we steered to the north, leaving Toofoa and Kao on our larboard, keeping along the west side of a reef of rocks, which lie to the westward of Kotoo, till we came to their northern extremity, round which we hauled in for the island.

We had, in the afternoon, been within two leagues of Toofoa, the sinoak of which we saw several times in the day. The Friendly islanders have some superstitious notions about the volcano upon it, which they call kollefeea, and say it is an otoo, or divinity. According to their account, it sometimes throws up very large stones; and they compare the crater to the size of a small islet, which has never ceased smoking in their memory; nor have they any tradition that it ever did.

At day-break the next morning, being then not far from Kao, which is a vast rock of a conic figure, we steered to the east, for the passage between the islands Footooa and Hafaiva, with a gentle breeze at south-east. About ten o'clock, Feenou came on board, and remained with us all day. He brought with him two hogs and a quantity of fruit; and, in the course of the day, several canoes, from the different islands, came round us, to barter quantities of the latter article, which was very acceptable, as our stock was nearly expended.

In the course of this night we could plainly see flames issuing from the volcano upon Toofoa, though to no great height.

At day-break in the morning of the 16th, with a gentle breeze at south-east, we steered north-east for Hapaec, which was now in sight. The wind scanting upon us, we could not fetch the land; so that we were forced to ply to windward.

On the 17th, I dispatched a boat to look for anchorage. A proper place was soon found; and we came-to abreast of a reef, being that which joins Lefooga to Foa.

By the time we had anchored, the ships were filled with the natives. They brought from the shore hogs, fowls, fruit, and roots, which they exchanged for hatchets, knives, nails, beads, and cloth. I went on shore, accompanied by Omai and Feenou, landing at the north part of Lefooga, a little to the right of the ship's station.

The

The chief conducted me to a hut, situated close to the sea-beach, which I had seen brought thither, but a few minutes before, for our reception. In this Feenou, Omai, and myself, were seated. The other chiefs, and the multitude, composed a circle, on the outside, fronting us; and they also sat down. I was then asked, How long I intended to stay? On my saying, Five days; Taipa was ordered to come and sit by me, and proclaim this to the people. He then harangued them, in a speech mostly dictated by Feenou. The purport of it, as I learnt from Omai, was, that they were all, both old and young, to look upon me as a friend, who intended to remain with them a few days; that during my stay, they must not steal any thing, nor molest me any other way; and that it was expected they should bring hogs, fowls, fruit, &c. to the ships, where they would receive, in exchange for them, such and such things, which he enumerated. Soon after Taipa had finished his address to the assembly, Feenou left us. Taipa then took occasion to signify to me, that it was necessary I should make a present to the chief of the island, whose name was Earoupa. I was not unprepared for this; and gave him such articles as far exceeded his expectation. My liberality to him brought upon me demands of the same kind, from two chiefs of other isles who were present, and from Taipa himself. When Feenou returned, which was immediately after I had made the last of these presents, he pretended to be angry with Taipa for suffering me to give away so much; but I looked upon this as mere finesse; being confident that he acted in concert with the others. He now took his seat again, and ordered Earoupa to sit by him, and to harangue the people as Taipa had done, and to the same purpose; dictating, as before, the heads of the speech.

These ceremonies being performed, the chief, at my request, conducted me to three stagnant pools of fresh water, as he was pleased to call it: and, indeed, in one of these the water was tolerable, and the situation not inconvenient for filling our casks. After viewing the watering-place, we returned to our former station, where I found a baked hog and some yams, smoaking hot, ready to be carried on board for my dinner. I invited Feenou and his friends to partake of it; and we embarked for the ship; but none but himself sat down with us at the table. After dinner I conducted them on shore; and, before I returned on board, the chief gave me a fine large turtle, and a quantity of yams. Our supply of provisions was copious; for, in the course of the day, we got, by barter, alongside the ship, about twenty small hogs, beside fruit and roots.

Next morning early, Feenou, and Omai, who scarcely ever quitted the chief, and now slept on shore, came on board. The object of the visit was to require my presence upon the island. After some time, I accompanied them; and, upon landing, was conducted to the same place where I had been seated the day before; and where I saw a large concourse of people already assembled. I guessed that something more than ordinary was in agitation; but could not tell what, nor could Omai inform me.

I had not long been seated, before near a hundred of the natives appeared in sight, and advanced, laden with yams, bread-fruit, plantains, cocoa-nuts, and sugar-canes. They deposited their burdens, in two heaps, or piles, upon our left, being the side they came from. Soon after arrived a number of others from the right, bearing the same kind of articles; which were collected into two piles upon that side. To these were tied two pigs, and six fowls; and to those, upon the left, six pigs, and two turtles. Earoupa seated himself before the several articles upon the left; and another chief before those upon the right; they being, as I judged, the two chiefs who had collected them, by order of Feenou, who seemed to be as implicitly obeyed here, as

he had been at Annamooka; and, in consequence of his commanding superiority over the chiefs of Hapæe, had laid this tax upon them for the present occasion.

As soon as this munificent collection of provisions was laid down in order, and disposed to the best advantage, the bearers of it joined the multitude, who formed a large circle round the whole. Presently after a number of men entered this circle, or area, before us, armed with clubs, made of the green branches of the cocoa-nut tree. These paraded about for a few minutes, and then retired; the one half to one side, and the other half to the other side, seating themselves before the spectators. Soon after, they successively entered the lists, and entertained us with single combats. One champion, rising up and stepping forward from one side, challenged those of the other side, by expressive gestures, more than by words, to send one of their body to oppose him. If the challenge was accepted, which was generally the case, the two combatants put themselves in proper attitudes, and then began the engagement, which continued till one or other owned himself conquered, or till their weapons were broken. As soon as each combat was over, the victor squatted himself down facing the chief, then rose up and retired. At the same time some old men, who seemed to sit as judges, gave their plaudit in a few words; and the multitude, especially those on the side to which the victor belonged, celebrated the glory he had acquired, in two or three huzzas.

This entertainment was now and then suspended for a few minutes. During these intervals there were both wrestling and boxing matches. The first were performed in the same manner as at Otaheite; and the second differed very little from the method practised in England. But what struck us with the most surprise was, to see a couple of lusty wenches step forth, and begin boxing, without the least ceremony, and with as much art as the men. This contest, however, did not last above half a minute, before one of them gave it up. The conquering heroine received the same applause from the spectators, which they bestowed upon the successful combatants of the other sex. We expressed some dislike at this part of the experiment; which, however, did not prevent two other females from entering the lists. They seemed to be girls of spirit, and would certainly have given each other a good drubbing, if two old women had not interposed to part them. All these combats were exhibited in the midst of at least three thousand people, and were conducted with the greatest good-humour on all sides.

As soon as these diversions were ended, the chief told me, that the heaps of provisions on our right hand were a present to Omai; and that those on our left hand, being about two-thirds of the whole quantity, were given to me. He added, that I might take them on board whenever it was convenient; but that there would be no occasion to set any of our people as guards over them, as I might be assured, that not a single cocoa-nut would be taken away by the natives. So it proved: for I left every thing behind, and returned to the ship to dinner, carrying the chief with me; and when the provisions were removed on board, in the afternoon, not a single article was missing. There was as much as loaded four boats; and I could not but be struck with the munificence of Feenou; for this present far exceeded any I had ever received from any of the sovereigns of the various islands I had visited in the Pacific Ocean. I lost no time in convincing our friend, that I was not insensible of his liberality; for, before he quitted my ship, I bestowed upon him such of my commodities as I guessed were most valuable in his estimation. And the return I made was so much to his satisfaction, that, as soon as he got on shore, he left me still indebted to him, by sending me a fresh present,





which signifies King. I had never heard any one of them give this title to Feenou, however extensive his authority over them, both here and at Annamooka, had appeared to be; which had all along inclined me, to suspect, that he was not the King; though his friend Taipa had taken pains to make me believe he was. Latooliboula remained under the stern till the evening, when he retired in his canoe to one of the islands. Feenou was on board my ship at the same time; but neither of these great men took the least notice of each other.

Nothing material happened the next day, except that some of the natives stole a tarpaulin, and other things, from off the deck. They were soon missed, and the thieves pursued; but without success.

In the morning of the 23d, as we were going to unmoor, in order to leave the island, Feenou and his prime minister Taipa came alongside in a sailing canoe, and informed me, that they were setting out for Vavaoo, an island which, they said, lies about two days' sail to the northward of Hapae. The object of their voyage, they would have me believe, was to get for me an additional supply of hogs, and some red feathered caps for Omai, to carry to Otaheite, where they are in high esteem. Feenou assured me, that he should be back in four or five days; and desired me not to sail till his return, when, he promised, he would accompany me to Tongataboo. I thought this a good opportunity to get some knowledge of Vavaoo, and proposed to him to go thither with the ships. But he seemed not to approve of the plan; and by way of diverting me from it, told me, that there was neither harbour, nor anchorage about it. I therefore consented to wait, in my present station, for his return; and he immediately set out.

The next day our attention was for some time taken up with a report industriously spread by some of the natives, that a ship like ours had arrived at Annamooka since we left it; they also added, that Toobou, the chief of that island, was hastening thither to receive these new-comers. However, upon investigation, there appeared no foundation for it. What end the invention of this tale could answer, was not easy to conjecture; unless we suppose it to have been artfully contrived, to get us removed from the one island to the other.

In my walk, on the 25th, I happened to step into a house, where a woman was dressing the eyes of a young child, who seemed blind; the eyes being much inflamed, and a thin film spread over them. The instruments she used were two slender wooden probes, with which she had brushed the eyes so as to make them bleed. It seems worth mentioning, that the natives of these islands should attempt an operation of this sort; though I entered the house too late, to describe exactly how this female oculist employed the wretched tools she had to work with.

I was fortunate enough to see a different operation going on in the same house, of which I can give a tolerable account. I found there another woman shaving a child's head, with a shark's tooth stuck into the end of a piece of stick. I observed, that she first wetted the hair with a rag dipped in water, applying her instrument to that part which she had previously soaked. The operation seemed to give no pain to the child; although the hair was taken off as close as if one of our razors had been employed. Encouraged by what I now saw, I soon after tried one of these singular instruments upon myself, and found it to be an excellent succedaneum. However, the men of these islands have recourse to another contrivance when they shave their beards. The operation is performed with two shells; one of which they place under a small part of the beard, and with the other, applied above, they scrape that part off. In this manner they are able to shave very close. The process is, indeed, rather tedious,

tedious, but not painful ; and there are men amongst them who seem to profess this trade. It was as common, while we were here, to see our sailors go ashore to have their beards scraped off, after the fashion of Hapae, as it was to see their chiefs come on board to be shaved by our barbers.

Finding that little or nothing of the produce of the island was now brought to the ships, I resolved to change our station, and to wait Feenou's return from Vavaoo, in some other convenient anchoring place, where refreshments might still be met with. At half past two in the afternoon of the 26th of May, I hauled into a bay that lies between the south end of Lefooga, and the north end of Hoolaiva, and there anchored in seventeen fathoms water ; the Discovery did not get to anchor till sunset. She had touched upon a shoal, but backed off again, without receiving any damage.

As soon as we had anchored, I sent Mr. Bligh to sound the bay ; and myself, accompanied by Mr. Gore, landed on the southern part of Lefooga, to examine the country, and to look for fresh water. We were conducted to two wells ; but the water in both proved execrable ; and the natives, our guides, assured us that they had none better.

Near the south end of the island, and on the west side, we met with an artificial mount. From the size of some trees that were growing upon it, and from other appearances, I guessed that it had been raised in remote times : I judged it to be about forty feet high ; and the diameter of its summit measured fifty feet. At the bottom of this mount, stood a stone, which must have been hewn of coral rock. It was four feet broad, two and a half thick, and fourteen high ; and we were told by the natives present, that not above half its length appeared above ground. They called it *Tangata Arekce* \* ; and said, that it had been set up, and the mount raised, by some of their forefathers, in memory of one of their Kings ; but how long since, they could not tell.

About noon, a large sailing canoe came under our stern, in which was a person named Futtafaihe, or Poulaho, or both ; who, as the natives then on board told us, was King of Tongataboo, and of all the neighbouring islands. It was a matter of surprise to me, to have a stranger introduced under this character, which I had so much reason to believe really belonged to Feenou. However, it being my interest, as well as my inclination, to pay court to all the great men, without making inquiry into the validity of their assumed titles, I invited Poulaho on board ; he brought with him, as a present, two fat hogs, though not so fat as himself. If weight of body could give weight in rank or power, he was certainly the most eminent man in that respect we had seen ; for, though not very tall, he was very unwieldy, and almost shapeless with corpulence. I found him to be a sedate, sensible man. He viewed the ship and the several new objects with uncommon attention, and asked many pertinent questions ; one of which was : What could induce us to visit these islands ? After he had satisfied his curiosity in looking at the cattle, and other novelties, which he met with upon deck, I desired him to walk down into the cabin. To this his attendants objected, saying, that if he were to accept of that invitation, it must happen, that people would walk over his head ; but the chief himself, less scrupulous in this respect than his attendants, waved all ceremony, and walked down.

Poulaho sat down with us to dinner ; but he ate little, and drank less. When we rose from the table, he desired me to accompany him ashore. Omai was asked to be of the party ; but he was too faithfully attached to Feenou to shew any attention to

\* *Tangata*, in their language, is man ; *Arekce*, king.



his competitor; and therefore excused himself. I attended the chief in my own boat, having first made presents to him of such articles as, I could observe, he valued much, and were even beyond his expectation to receive. I was not disappointed in my view of thus securing his friendship: for the moment the boat reached the beach, he ordered two more hogs to be brought, and delivered to my people. He was then carried out of the boat, by some of his own people, upon a board resembling a handbarrow, and went and seated himself in a small house near the shore; which seemed to have been erected there for his accommodation. He placed me at his side; and his attendants, who were not numerous, seated themselves in a semicircle before us, on the outside of the house. Behind the chief, or rather, on one side, sat an old woman, with a sort of fan in her hand, whose office it was to prevent his being pestered with the flies.

The several articles his people had got, by trading on board the ships, were now displayed before him. He looked over them all with attention; enquired what they had given in exchange, and seemed pleased with the bargains they had made. At length, he ordered every thing to be restored to the respective owners, except a glass bowl, with which he was so much pleased, that he reserved it for himself. The persons who brought these things to him, first squatted themselves down before him, then they deposited their several purchases, and immediately rose up and retired. The same respectful ceremony was observed in taking them away; and not one of them presumed to speak to him standing. I stayed till several of his attendants left him, first paying him obeisance, by bowing the hand down to the sole of his foot, and touching or tapping the same, with the upper and under side of the fingers of both hands. Others, who were not in the circle, came, as it seemed, on purpose, and paid him this mark of respect, and then retired, without speaking a word. I was quite charmed with the decorum that was observed. I had no where seen the like; not even amongst more civilized nations.

The master of the *Discovery*, who had been examining the channels by my orders, informed me, when I got on board, that as far as he had proceeded there was anchorage; but that toward the south, he saw a number of shoals and breakers. I therefore thought it better to return toward Annamooka by the same route, which we had so lately experienced to be a safe one.

Having come to this resolution, I should have sailed next morning, if the wind had not been unsettled. Poulaho, the King, as I shall now call him, came on board betimes; and brought, as a present to me, one of their caps, made, or at least covered, with red feathers. These caps were much sought after by us; for we knew they would be highly valued at Otaheite. But, though very large prices were offered, not one was ever brought for sale; which shewed, that they were no less valuable in the estimation of the people here; nor was there a person in either ship, that could make himself the proprietor of one, except myself, Captain Clerke, and Omai. These caps, or rather bonnets, are composed of the tail feathers of the tropic bird, with the red feathers of the parroquets wrought upon them, or jointly with them. They are made so as to tie upon the forehead, without any crown, and have the form of a semicircle, whose radius is eighteen or twenty inches.

At day-break the next morning, I weighed with a fine breeze at east-north-east, and stood to the westward, with a view to return to Annamooka. We were followed by several sailing canoes, in one of which was the King. He quitted us in a short time, but left his brother and five of his attendants on board. We had also the company of a chief, just then arrived from Tongataboo, whose name was Tooboueitoa.

The moment he arrived, he sent his canoe away, and declared that he and five more, who came with him, would sleep on board; so that I had now my cabin filled with visitors. They brought plenty of provisions with them, for which they always had suitable returns.

At day-break on the 31st, I stood for the channel which is between Kotoo and the reef of rocks that lie to the westward of it; but on drawing near, I found the wind too scant to lead us through. From an apprehension of losing the islands, with so many of the natives on board, I tacked and stood back, intending to wait till some more favourable opportunity. We did but just fetch in with Footooha, between which and Kotoo we spent the night, under reefed topails and forefail. The wind was fresh, and blew by squalls, with rain, and we were not without apprehensions of danger. I kept the deck till midnight, when I left it to the master, with such directions as I thought would keep the ships clear of the shoals. Our ship, by a small shift of the wind, fetched farther to the windward than was expected. By this means she was very near running full upon a low sandy isle, called Pootoo. It happened, very fortunately, that the people had just before been ordered upon deck, to put the ship about, so that the necessary movements were executed with judgment and alertness; and this alone saved us from destruction. The Discovery being astern, was out of danger. Such hazardous situations are the unavoidable companions of the man who goes upon a voyage of discovery.

This circumstance frightened our passengers so much, that they expressed a strong desire to get ashore. Accordingly, as soon as daylight returned, I hoisted out a boat, and ordered the officer who commanded her, after landing them at Kotoo, to sound along the reef that spits off from that island, for anchorage. For I was full as much tired as they could be, with beating about the surrounding isles and shoals, and determined to get to an anchor somewhere or other, if possible. While the boat was absent, we attempted to turn the ships through the channel, between the sandy isle and the reef of Kotoo, in expectation of finding a moderate depth of water behind them to anchor in. But meeting with a tide or current against us, we were obliged to desist, and anchor in fifty fathoms water, with the sandy isle bearing east by north, one mile distant.

We lay here until the 4th, when we weighed; and with a fresh gale at east-south-east, stood away for Annamooka, where we anchored next morning, nearly in the same station which we had lately occupied.

I went on shore soon after, and found the inhabitants very busy in their plantations, digging up yams to bring to market. It appeared also that they had been very busy, while we were absent, in cultivating; for we now saw several large plantain fields in places which we had so lately seen lying waste. The yams were now in the greatest perfection; and we procured a good quantity, in exchange for pieces of iron.

Before I returned on board, I visited the several places where I had sown melon seeds, and had the mortification to find, that most of them were destroyed by a small ant; but some pineapple plants, which I had also left, were in thriving state.

About noon next day, Feenou arrived from Vavaoo. He told us, that several canoes, laden with hogs and other provisions, which had sailed with him from that island, had been lost, owing to the late blowing weather; and that every body on board them had perished. This melancholy tale did not seem to affect any of his countrymen who heard it; and as to ourselves, we were, by this time, too well acquainted with his character, to give much credit to such a story. The following morning, Poulaho,

and

and the other chiefs, who had been wind-bound with him, arrived. I happened at this time to be ashore in company with Feenou, who now seemed to be sensible of the impropriety of his conduct, in assuming a character that did not belong to him. For he not only acknowledged Poulaho to be King of Tongataboo and the other isles, but affected to insist much on it; which, no doubt, was with a view to make amends for his former presumption. I left him, to visit this greater man, whom I found sitting with a few people before him. But every one hastening to pay court to him, the circle increased pretty fast. I was very desirous of observing Feenou's behaviour on this occasion, and had the most convincing proof of his superiority; for he placed himself amongst the rest that sat before Poulaho, as attendants on his Majesty. Both he and Poulaho went on board with me to dinner; but only the latter sat at table. Feenou, having made his obeisance in the usual way, saluting his sovereign's foot with his head and hands, retired out of the cabin. The King had before told us that this would happen; and it now appeared, that Feenou could not even eat nor drink in his royal presence.

At eight o'clock next morning, we steered for Tongataboo, having a gentle breeze at north-east: about fourteen or fifteen sailing vessels, belonging to the natives, set out with us; but every one of them outran the ships considerably.

We continued our course till daybreak, and presently after saw several small islands before us, and Eooa and Tongataboo beyond them. We had at this time twenty-five fathoms water, over a bottom of broken coral and sand. The depth gradually decreased as we drew near the isles above mentioned. We were, insensibly, drawn upon a large flat, upon which lay innumerable coral rocks below the surface of the water. Notwithstanding all our care to keep the ship clear of them, we could not prevent her from striking on one of these rocks. Nor did the *Discovery*, though behind us, escape any better. Fortunately, neither of the ships stuck fast, nor received any damage. We could not get back without increasing the danger, as we had come in almost before the wind. The moment we found a spot where we could drop the anchor, clear of rocks, we came to; and sent the masters with the boats, to sound.

About four o'clock, the boats made the signal for having found good anchorage. Upon this we weighed, and stood in till dark, and then anchored in nine fathoms, having a fine, clear sandy bottom.

Next morning, while we were plying up the harbour, to which the natives directed us, the King kept sailing round us in his canoe. There were, at the same time, a great many small canoes about the ships. Two of these which could not get out of the way of his royal vessel, he ran quite over, with as little concern as if they had been bits of wood. Amongst many others who came on board the *Resolution*, was Otago, who had been so useful to me when I visited Tongataboo during my last voyage; and one Toobou, who, at that time, had attached himself to Captain Furneaux. Each of them brought a hog and some yams, as a testimony of his friendship; and I was not wanting, on my part, in making a suitable return.

At length, about two in the afternoon, we arrived at our intended station. It was a very snug place, formed by the shore of Tongataboo on the south-east, and two small islands on the east and north-east. Here we anchored in ten fathoms water, over a bottom of oozy sand; distant from the shore one-third of a mile.

Soon after we had anchored, having first dined, I landed, accompanied by Omai, and some of the officers. We found the King waiting for us upon the beach; he immediately conducted us to a small neat house, situated a little within the skirts of the

woods, with a fine large area before it. This house, he told me, was at my service, during our stay at the island.

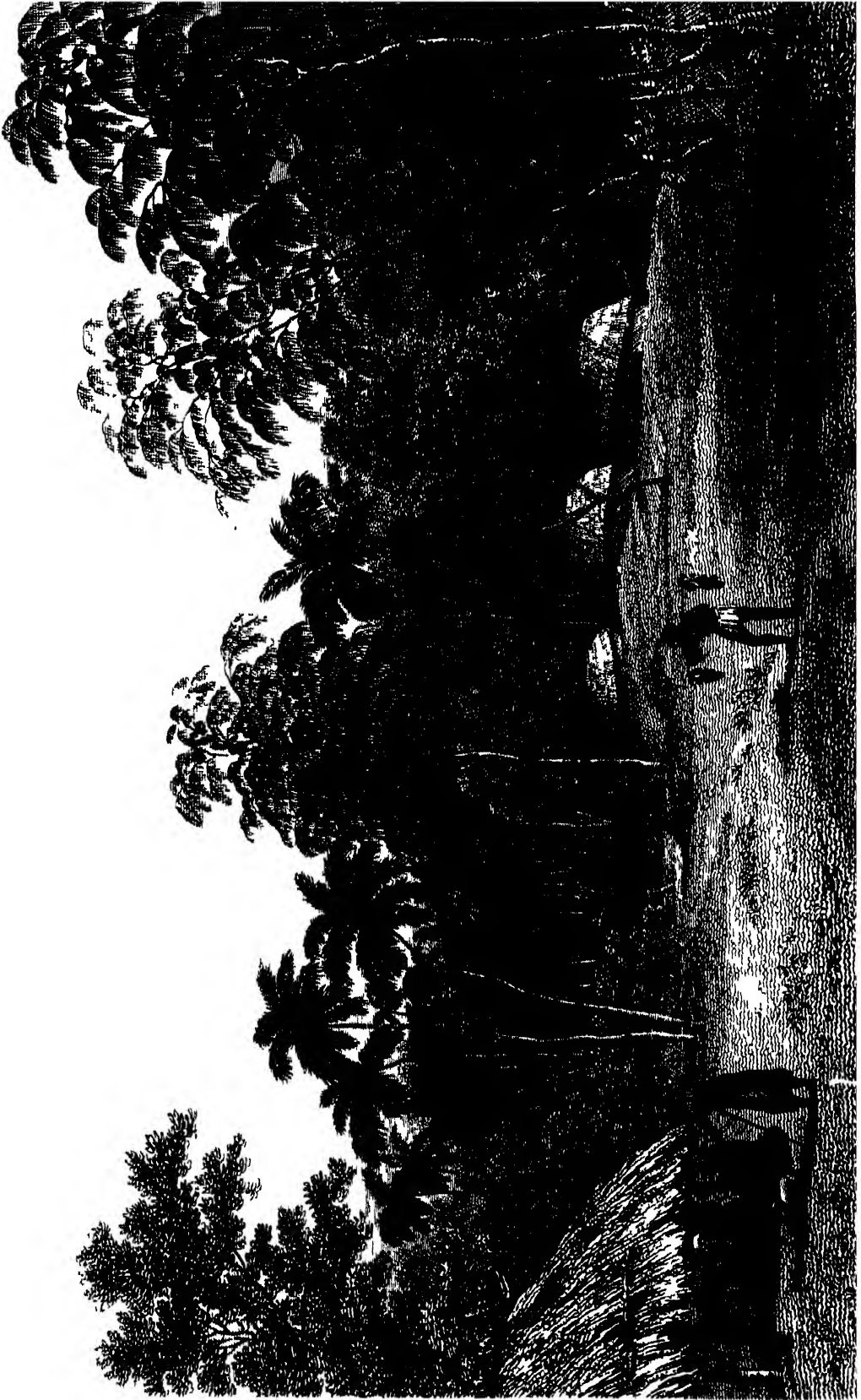
We had a large assembly of natives, who were brought to the house, and distributed a bowl of the native liquor was then presented. In the same time, a great flag and two pieces of baked yams were produced, and afterwards divided into ten portions. These portions were then given to certain people present; but how many were to share each, I could not tell. One of them, I observed, was bestowed upon the King himself, and one remained undivided of which, I judged, was for the King himself to take a choice bit. The liquor was next served out, but I observed, that not a fourth part of the company had tasted either the victuals or the drink. It is worthy of remark, though this was the first time of our landing, and a great many people were present, who had never seen us before; yet no one was troublesome; but the greatest good order was preserved throughout the whole assembly.

As I intended to make some stay at Toiyabou, we pitched a tent in the forenoon, just by the house which Poulaho had assigned for our use. The horses, cattle, and sheep were afterwards landed, and a party of marines, with their officer, stationed a guard there. The observatory was then set up, at a small distance from the other tent; and Mr. King resided on shore, to attend the observations. The gunners were ordered to conduct the traffic with the natives, who thronged from every part of the island with hogs, yams, cocoa-nuts, and other articles of their produce. In a short time, our land-post was like a fair, and the ships were so crowded with visitors, that we had hardly room to stir upon the decks.

-Feenoh had taken up his residence in our neighbourhood; but he was no longer the leading man. However, we still found him to be a person of consequence, and we had daily proofs of his opulence and liberality, by the continuance of his valuable presents. But the King was equally attentive in this respect; for scarcely a day passed without receiving from him some considerable donation. We now heard, that there were other great men of the island, whom we had not as yet seen. Otago and Toobou, in particular, mentioned a person named Mareewagee, who, they said, was of the first consequence in the place. Some of the natives even hinted that he was too great a man to confer the honour of a visit upon us. This account exciting my curiosity, I this day mentioned to Poulaho, that I was very desirous of waiting upon Mareewagee; and he readily agreed to accompany me to the place of his residence the next morning.

Accordingly, we set out pretty early in the pinnace, and entered a spacious bay or inlet, in which we towed about a league, and landed amidst a considerable number of people, who received us with a sort of acclamation, not unlike our huzzaing. They immediately separated to let Poulaho pass, who took us into a small inclosure, and shifted the piece of cloth he wore for a new piece, neatly folded, that was carried by a young man. The old woman shifted in dressing him, and gave me over his cloth, as we supposed, to prevent its being dirty when he lay down. I then now asking him where Mareewagee was, to our great surprise he said he had just gone from the place. It afterwards appeared, that, in the afternoon, we had been under some gross mistake, and that our interpreter, Otago, had either been misinformed, or had misunderstood what was told him about the great man, on whose account we had made this excursion.

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The place we went to was a village, most delightfully situated on the bank of the inlet, where all, or most of the principal persons of the island reside; each having his house in the midst of a small plantation with lesser houses, and offices for servants. These plantations are neatly fenced round; and, for the most part, have only one entrance: this is by a door, fastened on the inside by a prop of wood; so that a person has to knock before he can get admittance. Every article of the vegetable produce of the island, abounded in these plantations; but these, I observed, are not the residence of people of the first rank. There are some large houses near the public roads, with spacious smooth grass-plots before them, and uninclosed. These, I was told, belonged to the King, and, probably, they are the places where their public assemblies are held.

About noon the next day, this Mareewagee, of whom we had heard so much, actually came to the neighbourhood of our post on shore; and with him a very considerable number of people of all ranks. I was informed, that he had taken this trouble on purpose to give me an opportunity of waiting upon him; having, probably, heard of the displeasure I had shewn on my disappointment the day before. In the afternoon, a party of us, accompanied by Feenou, landed to pay him a visit. We found a person sitting under a large tree, near the shore, a little to the right of the tent. A piece of cloth, at least forty yards long, was spread before him, round which a great number of people of both sexes were seated. It was natural to suppose that this was the great man; but we were undeceived by Feenou, who informed us, that another, who sat on a piece of mat, a little way from this chief, to the right hand, was Mareewagee; and he introduced us to him, who received us very kindly, and desired us to sit down by him. The person who sat under the tree fronting us, was called Toobou; and when I have occasion to speak of him afterward, I shall call him old Toobou, to distinguish him from his namesake, Captain Furneaux's friend. Both he and Mareewagee had a venerable appearance. The latter is a slender man, and from his appearance, seems to be considerably above threescore years of age. The former is rather corpulent, and almost blind with a disorder of his eyes; though not so old.

We entertained them for about an hour, with the performance of two french-horns and a drum. But they seemed most pleased with the firing off a pistol, which Captain Clerke had in his pocket. Before I took my leave, the large piece of cloth was rolled up, and with a few cocoa-nuts, presented to me.

Toward noon, Poulaho returned from the place where we had left him two days before, and brought with him his son, a youth about twelve years of age. I had his company at dinner; but the son, though present, was not allowed to sit down with him. It was very convenient to have him for my guest; for when he was present, which was generally the case while we stayed here, every other native was excluded from the table; and but few of them would remain in the cabin. Whereas if it happened that neither he nor Feenou were on board, the inferior chiefs would be very importunate to be of our dining party; and then we were so crowded that we could not sit down to a meal with any satisfaction. The King was very soon reconciled to our manner of cookery; but still, I believe, he dined thus frequently with me, more for the sake of what we gave him to drink, than for what we set before him to eat: for he had taken a liking to our wine, could empty his bottle as well as most men, and was as cheerful over it.

In the morning of the 15th, I received a message from old Toobou, that he wanted to see me ashore. We found him, like an ancient patriarch, seated under the shade of



a tree, with a large piece of the cloth, made in the island, spread out at full length before him; and a number of respectable looking people sitting round it. He desired us to place ourselves by him; and then he told Omai, that the cloth, together with a piece of red feathers, and about a dozen cocoa-nuts, were his present to me. I thanked him for the favour; and desired he would go on board with me, as I had nothing on shore to give him in return.

Omai now left me, being sent for by Poulaho; and soon after, Feenou came and acquainted me that young Fattafaihe, Poulaho's son, desired to see me. I obeyed the summons, and found the Prince and Omai sitting under a large canopy of the finer sort of cloth; with a piece of the coarser sort spread under them, and before them, that was seventy-six yards long, and seven and a half broad. On one side was a large old boar; and on the other side a heap of cocoa-nuts. A number of people were seated round the cloth; and amongst them, I observed Mareewagee, and others of the first rank. I was desired to sit down by the Prince; and then Omai informed me, that he had been intrusted by the King to tell me, that as he and I were friends, he hoped that his son might be joined in this friendship; and that as a token of my consent, I would accept of his present. I very readily agreed to the proposal; and it being now dinner-time, I invited them all on board.

Accordingly, the young Prince, Mareewagee, old Toobou, three or four inferior chiefs, and two respectable old ladies of the first rank, accompanied me. Mareewagee was dressed in a new piece of cloth, on the skirts of which were fixed six pretty large patches of red feathers. This dress seemed to have been made on purpose for this visit; for as soon as he got on board, he put it off, and presented it to me; having, I guess, heard that it would be acceptable on account of the feathers. Every one of my visitors received from me such presents as, I had reason to believe, they were highly satisfied with. When dinner came upon table, not one of them would sit down, or eat a bit of any thing that was served up. On expressing my surprise at this, they were all taboo, as they said; which word has a very comprehensive meaning; but in general signifies, that a thing is forbidden. Why they were laid under such restraints, at present, was not explained. Dinner being over, and having gratified their curiosity, by shewing to them every part of the ship, I then conducted them ashore.

As soon as the boat reached the beach, Feenou, and some others, instantly stepped out. Young Fattafaihe following them, was called back by Mareewagee, who now paid the heir apparent the same obeisance, and in the same manner, that I had seen it paid to the King.

I was not sorry to be present on this occasion, as I was furnished with the most unequivocal proofs of the supreme dignity of Poulaho and his son over the other principal chiefs. Indeed, by this time, I had acquired some certain information about the relative situations of the several great men, whose names have been so often mentioned. I now knew that Mareewagee and old Toobou were brothers. Poulaho's appearance having satisfied us that we had been under a mistake, in considering Feenou as the sovereign of these islands, we had been, at first, much puzzled about his real rank; but that was, by this time, ascertained. Feenou was one of Mareewagee's sons, and Tooboocitoa was another.

Mr. Anderson, with some others, made an excursion into the country, which furnished him with the following remarks. Near the creek, which runs to the westward of the tent, the land is quite flat, and partly overflowed by the sea every tide. When that retires, the surface is seen to be composed of coral rock, with holes of yellowish mud scattered up and down; and toward the edges, where it is firmer, are

innumerable little openings, from which issue as many small crabs, of two or three different sorts, which swarm upon the spot, as flies upon a carcase; but are so nimble, that, on being approached, they disappear in an instant, and baffle even the natives to catch any of them.

At this place is a work of art, which shews that these people are capable of some design and perseverance, when they mean to accomplish any thing. This work begins on one side as a narrow causeway, which, becoming gradually broader, rises, with a gentle ascent, to the height of ten feet, where it is five paces broad, and the whole length seventy-four paces. Joined to this is a sort of circus, whose diameter is thirty paces, and not above a foot or two higher than the causeway that joins it, with some trees planted in the middle. On the opposite side, another causeway of the same sort descends; but this is not above forty paces long. All that we could learn respecting it from the natives, was, that it belonged to Poulaho, and is called Etchee.

On the 16th, in the morning, Mr. Gore and I took a walk into the country; in the course of which nothing remarkable appeared, but our having opportunities of seeing the whole process of making cloth, which is the principal manufacture of these islands, as well as of many others in this ocean. In the narrative of my first voyage, a minute description is given of this operation, as performed at Otaheite; but the process here differing in some particulars, it may be worth while to give the following account of it.

The manufacturers, who are females, take the slender stalks or trunks of the paper mulberry, which they cultivate for that purpose, and which seldom grows more than six or seven feet in height, and about four fingers in thickness. From these they strip the bark, and scrape off the outer rind with a musle-shell. The bark is then rolled up to destroy the convexity which it had round the stalk, and macerated in water for some time (they say, a night). After this, it is laid across the trunk of a small tree, squared, and beaten with a square wooden instrument, about a foot long, full of coarse grooves on all sides, but sometimes with one that is plain. According to the size of the bark, a piece is soon produced; but the operation is often repeated by another hand, or it is folded several times, and beat longer, which seems rather intended to close than to divide its texture. When this is sufficiently effected, it is spread out to dry; the pieces being from four to six, or more, feet in length, and half as broad. They are then given to another person, who joins the pieces, by sinearing part of them over with the viscous juice of a berry, called tooo, which serves as a glue. Having been thus lengthened, they are laid over a large piece of wood, with a kind of stamp, made of a fibrous substance pretty closely interwoven, placed beneath. They then take a bit of cloth, and dip it in a juice, expressed from the bark of a tree, called kokka, which they rub briskly upon the piece that is making. This, at once, leaves a dull brown colour, and a dry gloss upon its surface; the stamp, at the same time, making a slight impression, that answers no other purpose that I could see, but to make the several pieces that are glued together, stick a little more firmly. In this manner they proceed, joining and staining by degrees, till they produce a piece of cloth, of such length and breadth as they want; generally leaving a border, of a foot broad, at the sides, and longer at the ends, unstained. Throughout the whole, if any parts of the original pieces are too thin, or have holes, which is often the case, they glue spare bits upon them, till they become of an equal thickness. When they want to produce a black colour, they mix the soot procured from an oily nut, called dooedoo, with the juice of the kokka, in different quantities, according to the proposed depth of the tinge. They say, that the black sort of cloth, which is commonly most glazed, makes a cold dress,

dress, but the other a warm one; and, to obtain strength in both, they are always careful to join the small pieces lengthwise, which makes it impossible to tear the cloth in any direction but one.

On our return from the country, we met with Feenou, and took him, and another young chief, on board to dinner. When our fare was set upon the table, neither of them could eat a bit; saying, that they were taboo avy. But after enquiring how the victuals had been dressed, having found that no avy (water) had been used in cooking a pig and some yams, they both sat down, and made a very hearty meal; and, on being assured that there was no water in the wine, they drank of it also. From this we conjectured, that, on some account or another, they were, at this time, forbidden to use water; or, which was more probable, they did not like the water we made use of, it being taken out of one of their bathing places. This was not the only time of our meeting with people that were taboo avy; but for what reason, we never could tell with any degree of certainty.

Next day was fixed upon by Mareewagee for giving a grand haiva, or entertainment, to which we were all invited. For this purpose, a large space had been cleared, before the temporary hut of this chief, near our post, as an area where the performances were to be exhibited. In the morning, great multitudes of the natives came in from the country, every one carrying a pole, about six feet long, upon his shoulder; and at each end of every pole a yam was suspended. These yams and poles were deposited on each side of the area, so as to form two large heaps, decorated with different sorts of small fish, and piled up to the greatest advantage. They were Mareewagee's present to Captain Clerke and me.

Every thing being thus prepared, about eleven o'clock they began to exhibit various dances, which they call mai. The music consisted, at first, of seventy men as a chorus, who sat down; and amidst them were placed three instruments, which we called drums, though very unlike them. They are large cylindrical pieces of wood, or trunks of trees, from three to four feet long, some twice as thick as an ordinary-sized man, and some smaller, hollowed entirely out, but closed at both ends, and open only by a chink, about three inches broad, running almost the whole length of the drums; by which opening, the rest of the wood is certainly hollowed, though the operation must be difficult. This instrument is called naffa; and, with the chink turned toward them, they sit and beat strongly upon it with two cylindrical pieces of hard wood, about a foot long, and as thick as the wrist; by which means, they produce a rude, though loud and powerful sound. They change the tones, by beating in the middle, or near the end.

The first dance consisted of four ranks, of twenty-four men each, holding in their hands a little thin light wooden instrument, about two feet long, and in shape not unlike a small oblong paddle. With these, which are called pagge, they made a great many different motions; such as pointing them toward the ground on one side, at the same time inclining their bodies that way, from which they were shifted to the opposite side in the same manner; then passing them quickly from one hand to the other, and twirling them about very dexterously, with a variety of other manœuvres, all which were accompanied by corresponding attitudes of the body. Their motions were at first slow, but quickened as the drums beat faster; and they recited sentences, in a musical tone, the whole time, which were answered by the chorus; but at the end of a short space they all joined, and finished with a shout; then the rear rank dividing, shifted themselves very slowly round each end, and meeting in the front, formed the first rank; the whole number continuing to recite the sentences as before. The other  
ranks

ranks did the same successively, till that which at first was the front, became the rear ; and their evolution continued in the same manner, till the last rank regained its first situation. Then they began a much quicker dance, though slow at first, and sung about ten minutes, when the whole body divided into two parts, retreated a little, and then approached, forming a sort of circular figure, which finished the dance ; the drums being removed, and the chorus going off the field at the same time.

Three drums (which, at least, took two, and sometimes three men to carry them) were now brought in, and seventy men sat down as a chorus to another dance. This consisted of two ranks, of sixteen persons each, with young Toobou at their head. These danced, sung, and twirled the pagge as before ; but, in general, much quicker. A motion that met with particular approbation, was one in which they held the face aside, as if ashamed. The back rank closed before the front one, and that again resumed its place as in the two former dances. At that instant, two men entered very hastily, and exercised the clubs which they use in battle. They did this, by first twirling them in their hands, and making circular strokes before them with great force and quickness ; but so skilfully managed, that, though standing quite close, they never interfered. To them succeeded a person with a spear, in the same hasty manner ; looking about eagerly, as if in search of somebody to throw it at. He then ran hastily to one side of the crowd in the front, and put himself in a threatening attitude, as if he meant to strike with his spear at one of them, bending the knee a little, and trembling, as it were with rage. He continued in this manner only a few seconds, when he moved to the other side, and having stood in the same posture there for the same short time, retreated from the ground as fast as when he made his appearance.

The last dance had two drums, and consisted of sixty men, who had not danced before, disposed in three rows, having twenty-four in front. They divided into two bodies, with their backs to each other ; formed again, shifted their ranks, as in the other dances ; divided and retreated, making room for two champions, who exercised their clubs as before, and after them two others : the dancers all the time reciting slowly in turn with the chorus ; after which they advanced, and finished.

These dances lasted from eleven till near three o'clock ; and though they were, doubtless, intended to shew us a specimen of their dexterity, vast numbers of their own people attended as spectators. Some of us computed that there were not less than ten or twelve thousand within the compass of a quarter of a mile, drawn together, for the most part, by mere curiosity.

It is with regret I mention that we could not understand what was spoken, while we were able to see what was acted in these amusements. This, doubtless, would have afforded us much information as to the genius and customs of these people. It was observable, that though the spectators always approved of the various motions, when well made, a great share of the pleasure they received seemed to arise from the sentimental part, or what the performers delivered in their speeches. However, the mere acting part, independently of the sentences repeated, was well worth our notice, both with respect to the extensive plan on which it was executed, and to the various motion, as well as the exact unity, with which they were performed. No pen can describe the numerous actions and motions, the singularity of which was not greater than was the ease and gracefulness with which they were performed.

The whole was conducted with far better order than could have been expected in so large an assembly. Amongst such a multitude, there must be a number of ill-disposed people ; and we hourly experienced it. All our care and attention did not prevent their plundering us in every quarter ; and that in the most daring and insolent man-

ner. There was hardly any thing that they did not attempt to steal ; and yet, as the crowd was always so great, I would not allow the sentries to fire, lest the innocent should suffer for the guilty. They once, at noon-day, ventured to aim at taking an anchor from off the *Discovery's* bows ; and they would certainly have succeeded, if the flook had not hooked one of the chain-plates in lowering down the ship's side, from which they could not disengage it by hand ; and tackles were things they were unacquainted with. The only act of violence they were guilty of, was the breaking the shoulder-bone of one of our goats, so that she died soon after. This loss fell upon themselves, as she was one of those that I intended to leave upon the island ; but of this the person who did it was ignorant.

Early in the morning of the 18th, an accident happened that strongly marked one of their customs. A man got out of a canoe into the quarter-gallery of the *Resolution*, and stole from thence a pewter basin. He was discovered, pursued, and brought alongside the ship. On this occasion, three old women, who were in the canoe, made loud lamentations over the prisoner, beating their breasts and faces in a most violent manner with the inside of their fists ; and all this was done without shedding a tear. This mode of expressing grief is what occasions the mark which almost all this people bear on the face, over the cheek-bones.

This day, I bestowed on Mareewagec some presents, in return for those we had received from him the day before ; and as the entertainments which he had then exhibited for our amusement, called upon us to make some exhibition in our way, I ordered a party of marines to go through their exercise, on the spot where his dances had been performed ; and in the evening, played off some fireworks at the same place. Poulaho, with all the principal chiefs, and a great number of people of all denominations, were present. The platoon firing, which was executed tolerably well, seemed to give them pleasure ; but they were lost in astonishment when they beheld our water-rockets.

In expectation of this evening show, the circle of natives about our tent being pretty large, they engaged the greatest part of the afternoon, in boxing and wrestling. When any of them chuses to wrestle, he gets up from one side of the ring, and crosses the ground in a sort of measured pace, clapping smartly on the elbow-joint of one arm, which is bent, and produces a hollow sound ; that is reckoned the challenge. If no person comes out from the opposite side to engage him, he returns in the same manner and sits down ; but sometimes stands clapping in the midst of the ground, to provoke some one to come out. If an opponent appears, they come together with marks of the greatest good-nature, generally smiling, and taking time to adjust the piece of cloth which is fastened round the waist. They then lay hold of each other by this girdle, with a hand on each side ; and he who succeeds in drawing his antagonist to him, immediately tries to lift him upon his breast, and throw him upon his back ; and if he be able to turn round with him two or three times in that position, before he throws him, his dexterity never fails of procuring plaudits from the spectators. If they be more equally matched, they close soon, and endeavour to throw each other by entwining their legs, or lifting each other from the ground ; in which struggles they shew a prodigious exertion of strength, every muscle, as it were, being ready to burst with straining. When one is thrown, he immediately quits the field, but the victors sit down, for a few seconds, then gets up, and goes to the side he came from, who proclaim the victory aloud, in a sentence delivered slowly, and in a musical cadence. When they find that they are so equally matched as not likely to throw each other, they leave off by mutual consent.

The boxers advance side-ways, changing the side at every pace with one arm stretched fully out before, the other behind; and holding a piece of cord in one hand, which they wrap firmly about it when they find an antagonist, or else have done so before they enter. This, I imagine, they do, to prevent a dislocation of the hand or fingers. Their blows are directed chiefly to the head; but sometimes to the sides; and are dealt out with great activity. One of their most dexterous blows is to turn round on their heel, just as they have struck their antagonist, and to give him another very smart one with the other hand backward.

The boxing matches seldom last long; and the parties either leave off together, or one acknowledges his being beat. But they never sing the song of victory in these cases, unless one strikes his adversary to the ground; which shews, that of the two, wrestling is their most approved diversion. Some of our people ventured to contend with them in both exercises, but were always worsted.

The animals which we had brought were all on shore. Knowing their thievish disposition, I thought it prudent to declare my intention of leaving some of them behind, and even to make a distribution of them previously to my departure.

With this view, in the evening of the 19th, I assembled all the chiefs before our house, and my intended presents to them were marked out. To Poulaho, the King, I gave a young English bull and cow; to Mareewagee, a Cape ram and two ewes; and to Feenou, a horse and a mare. As my design to make such a distribution had been made known the day before, most of the people in the neighbourhood were then present. I instructed Omai to tell them that there were no such animals within many months sail of their island; that we had brought them, for their use, from that immense distance, at a vast trouble and expense; that therefore they must be careful not to kill any of them till they had multiplied to a numerous race; and lastly, that they and their children ought to remember that they had received them from the men of Britain. He also explained to them their several uses, and what else was necessary for them to know, or rather as far as he knew; for Omai was not very well versed in such things himself.

It soon appeared that some were dissatisfied with this allotment of our animals; for early next morning one of our kids and two turkey-cocks were missing. I could not be so simple as to suppose that this was merely an accidental loss; and I was determined to have them again. The first step I took was to seize on three canoes that happened to be alongside the ships. I then went ashore, and having found the King, his brother, Feenou, and some other chiefs, in the house that we occupied, I immediately put a guard over them, and gave them to understand that they must remain under restraint, till not only the kid and the turkeys, but the other things, that had been stolen from us at different times, were restored. They concealed, as well as they could, their feelings, on finding themselves prisoners; and having assured me that every thing should be restored as I desired, sat down to drink their kava, seemingly much at their ease. It was not long before an axe and an iron wedge were brought to me. In the mean time some armed natives began to gather behind the house; but on a part of our guard marching against them, they dispersed; and I advised the chiefs to give orders that no more should appear. Such orders were accordingly given by them, and they were obeyed. On asking them to go aboard with me to dinner, they readily consented. But some having afterwards objected to the King's going, he instantly rose up and declared he would be the first man. Accordingly we came on board. I kept them there till near four o'clock, when I conducted them ashore; and soon after the kid and one of the

turkey-cocks were brought back. The other, they said, should be restored the next morning. I believed this would happen, and released both them and the canoes.

After the chiefs had left us, I walked out with Omai, to observe how the people about us fared; for this was the time of their meals. I found that in general they were at short commons. Nor is this to be wondered at, since most of the yams, and other provisions which they brought with them, were sold to us; and they never thought of returning to their own habitations while they could find any sort of subsistence in our neighbourhood.

In this walk we met with about half a dozen women, in one place, at supper. Two of the company I observed being fed by the others; on our asking the reason, they said, taboo mattee. On farther enquiry we found that one of them had, two months before, washed the dead corpse of a chief; and that on this account she was not to handle any food for five months. The other had performed the same office to the corpse of another person of inferior rank, and was now under the same restriction; but not for so long a time.

Early the next morning the King came on board, to invite me to an entertainment, which he proposed to give the same day. He had already been under the barber's hands, his head being all besmeared with red pigment, in order to redden his hair, which was naturally of a dark brown colour. After breakfast I attended him to the shore; and we found the people very busy, in two places, in the front of our area, fixing in an upright and square position, thus [::], four very long posts, near two feet from each other. The space between the posts was afterward filled up with yams; and as they went on filling it, they fastened pieces of sticks across, from post to post, at the distance of about every four feet, to prevent the posts from separating by the weight of the inclosed yams, and also to get up by. When the yams had reached the top of the first posts, they fastened others to them, and so continued till each pile was the height of thirty feet or upwards. On the top of one, they placed two baked hogs; on the top of the other, a living one; and another they tied by the legs, half way up. It was matter of curiosity to observe, with what facility and dispatch these two piles were raised. Had our seamen been ordered to execute such a work, they would have sworn that it could not be performed without carpenters; and the carpenters would have called to their aid a dozen different sorts of tools, and have expended, at least, a hundred weight of nails; and after all it would have employed them as many days, as it did these people hours. But seamen, like most other amphibious animals, are always the most helpless on land. After they had completed these two piles, they made several other heaps of yams and bread-fruit on each side of the area; to which were added a turtle, and a large quantity of excellent fish.

I dined ashore. The King sat down with us; but he neither ate nor drank. I found that this was owing to the presence of a female, who, as we afterward understood, had superior rank to himself. As soon as this great personage had dined, she stepped up to the King, who put his hands to her feet; and then she retired. He immediately dipped his fingers in a glass of wine, and then received the obeisance of all her followers. This was the single instance we ever observed of his paying this mark of reverence to any person. At the King's desire, I ordered some fireworks to be played off in the evening; but unfortunately being damaged, this exhibition did not answer expectation.

As no more entertainments were to be expected on either side, and the curiosity of the populace was by this time, pretty well satisfied, most of them left us. We still  
however



however had thieves about us ; and encouraged by the negligence of our own people, we had continual instances of their depredations.

Some of the officers belonging to both ships, who had made an excursion into the interior parts of the island, without my leave, and indeed, without my knowledge, returned this evening, after an absence of two days. They had taken with them their muskets, with the necessary ammunition, and several small articles of the favourite commodities ; all which the natives had the dexterity to steal from them, in the course of their expedition. Feenou and Poulaho, upon this occasion, very justly observed, that if any of my people, at any time, wanted to go into the country, they ought to be acquainted with it ; in which case they would send proper persons along with them ; and then they would be answerable for their safety. Though I gave myself no trouble about the recovery of the things stolen upon this occasion, most of them, through Feenou's interposition, were recovered, except one musket and a few other articles of inferior value. By this time also we had recovered the turkey-cock, and most of the tools and other matters that had been stolen from our workmen. We had now recruited the ships with wood and water, and had finished the repairs of our sails. However, as an eclipse of the sun was to happen upon the 5th of July, and it was now the 25th of June, I resolved to defer sailing till that time had elapsed, in order to have a chance of observing it.

Having therefore some days of leisure before me, a party of us, accompanied by Poulaho, set out early next morning, in a boat, for Mooa, the village where he and the other great men usually reside. As we rowed up the inlet, we met fourteen canoes fishing in company ; in one of which was Poulaho's son. In each canoe was a triangular net, extended between two poles ; at the lower end of which was a cod to receive and secure the fish. They had already caught some fine mullets ; and they put about a dozen into our boat. I desired to see their method of fishing ; which they readily complied with. A shoal of fish was supposed to be upon one of the banks, which they instantly inclosed in a long net like a seine, or set-net. This the fishers, one getting into the water out of each boat, surrounded with the triangular nets in their hands ; with which they scooped the fish out of the seine, or caught them as they attempted to leap over it.

Leaving the Prince and his fishing-party, we proceeded to the bottom of the bay, and landed where we had done before, on our fruitless errand to see Mareewagee. Here we observed a *fiatoka*, or burying-place, which was almost close to the house, and was much more extensive, and seemingly of more consequence, than any we had seen at the other islands. We were told that it belonged to the King. It consisted of three pretty large houses, situated upon a rising ground, with a small one at some distance, all ranged longitudinally. They were covered and paved with fine pebbles, and the whole was inclosed by large flat stones of hard coral rock, properly hewn, placed on their edges ; one of which stones measured twelve feet in length, two in breadth, and above one in thickness. Within one of these houses were two rude wooden busts of men. On enquiring what these images were intended for, we were told they were merely memorials of some chiefs who had been buried there, and not the representations of any deity. In one of them was the carved head of an *Otaheite* canoe, which had been driven ashore on their coast, and deposited here.

After we had refreshed ourselves, we made an excursion into the country, attended by one of the King's ministers. Our train was not great, as he would not suffer the rabble to follow us. He also obliged all these whom we met upon our progress, to sit down till we had passed ; which is a mark of respect due only to their sovereigns. By

far the greatest part of the country was cultivated, and planted with various sorts of productions. We met with several large uninhabited houses, which we were told belonged to the King. There were many public and well-beaten roads, and abundance of foot-paths leading to every part of the island. It is remarkable that when we were on the most elevated parts, at least a hundred feet above the level of the sea, we often met with the same coral rock which is found at the shore; and yet these very spots, with hardly any soil upon them, were covered with luxuriant vegetation. We saw some springs, but the water was either stinking or brackish.

When we returned from our walk, which was not till the dusk of the evening, our supper was ready. It consisted of a baked hog, some fish and yams, all excellently well cooked, after the method of these islands. As there was nothing to amuse us after supper, we followed the custom of the country, and lay down to sleep, our beds being mats spread upon the floor, and cloth to cover us. The King, who had made himself very happy with some wine and brandy which we had brought, slept in the same house, as well as several others of the natives. Long before day-break, he and they all rose, and sat conversing by moon-light. The conversation, as might well be guessed, turned wholly upon us; but it was not long before they all returned, and with them several more of their countrymen.

They now began to prepare a bowl of kava; and, leaving them so employed, I went to visit old Toobou, Captain Furneaux's friend, who had a house hard by, which for size and neatness was exceeded by few in the place. As I had left the others, so I found here a company preparing a morning draught. This chief made a present to me of a living hog, a baked one, a quantity of yams, and a large piece of cloth. When I returned to the King, I found him, and his circle of attendants, drinking the second bowl of kava.

We had seen the drinking of kava sometimes at the other islands; but by no means so frequently as here, where it seems to be the only forenoon employment of the principal people. The kava is a species of pepper, which they cultivate for this purpose, and esteem it a valuable article. It seldom grows to more than a man's height; it branches considerably, with large heart-shaped leaves, and jointed stalks. The root is the only part that is used. They break it in pieces, scrape the dirt off with a shell, and then each begins and chews his portion, which he spits into a plantain-leaf. The person who is to prepare the liquor, collects all these mouthfuls, and puts them into a large wooden dish or bowl, adding as much water as will make it of a proper strength. It is then well mixed up with the hands; and some loose stuff, of which mats are made, is thrown upon the surface. The immediate effect of this beverage is not perceptible on these people, who use it so frequently, but on some of ours, who ventured to try it, though so nastily prepared, it had the same power as spirits have in intoxicating them; or rather, it produced that kind of stupefaction, which is the consequence of using opium, or other substances of that kind. I have seen them drink it seven times before noon, yet it is so disagreeable, or at least seems so, that the greatest part of them cannot swallow it without making wry faces, and shuddering afterward.

We now left Mooā, and set out to return to the ships. While we rowed down the lagoon or inlet, we met with two canoes coming in from fishing. Poulaho ordered them to be called alongside our boat, and took from them every fish and shell they had got. Why this was done, I cannot say; for we had plenty of provisions in the boat. Some of this fish he gave to me; and his servants sold the rest on board the ship.

We took a view of a curious coral rock, which seems to have been thrown upon the reef where it stands. It is elevated about ten or twelve feet above the surface of the sea that surrounds it. The base it rests upon is not above one-third of the circumference of its projecting summit, which I judged to be about one hundred feet, and is covered with *ctea* and *pandanus* trees.

When we got on board the ship, I found that every thing had been quiet during my absence, not a theft having been committed; of which Teenou and Futtafaihe, the King's brother, who had undertaken the management of his countrymen, boasted not a little. This shews what power the chiefs have, when they have the will to execute it; which we were seldom to expect, since whatever was stolen from us, generally, if not always, was conveyed to them.

The good conduct of the natives was of short duration; for the next day six or eight of them assaulted some of our people who were sawing planks. They were fired upon by the sentry; and one was supposed to be wounded, and three others taken. These I kept confined all night; and did not dismiss them without punishment. After this, they behaved with a little more circumspection, and gave us much less trouble. This change of behaviour was certainly occasioned by the man being wounded; for before they had only been told the effect of fire-arms, but now they had felt it. The repeated insolence of the natives had induced me to order the muskets of the sentries to be loaded with small shot, and to authorize them to fire on particular occasions. I took it for granted, therefore, that this man had only been wounded with small shot. But Mr. King and Mr. Anderson, in an excursion into the country, met with him, and found indubitable marks of his having been wounded, but not dangerously, with a musket-ball. I never could find out how this musket happened to be charged with ball; and there were people enough ready to swear that its contents were only small shot.

Mr. Anderson's account of the excursion, just mentioned, will fill up an interval of two days, during which nothing of note happened at the ships. "Mr. King and I went on the 30th along with Futtafaihe as visitors to his house, which is at Mooa, very near that of his brother Poulaho. A short time after we arrived, a pretty large hog was killed; which is done by repeated strokes on the head. The hair was then scraped off, very dexterously, with the sharp edges of pieces of split bamboo; taking the entrails out at a large oval hole cut in the belly by the same simple instrument. Before this they had prepared an oven; which is a large hole dug in the earth, filled at the bottom with stones, about the size of the fist, over which a fire is made, till they are red hot. They took some of these stones, wrapt up in leaves of the bread-fruit-tree, and filled the hog's belly, stuffing in a quantity of leaves, to prevent their falling out, and putting a plug of the same kind in the anus. The carcase was then placed on some sticks laid across the stones, in a standing posture, and covered with a great quantity of plantain-leaves. After which they dug up the earth all round; and having thus effectually closed the oven, the operation of baking required no farther interference.

In the mean time we walked about the country, but met with nothing remarkable, except a *fiatooka* of one house, standing on an artificial mount, at least thirty feet high. There was also at no great distance a number of *ctoa* trees, on which hung vast quantities of the large ternate bats, making a disagreeable noise. We could not kill any for want of muskets; but some that were got at Annamooka, measured near three feet, when the wings were extended. On our returning to Futtafaihe's house, he ordered the hog, that had been dressed, to be produced, with several baskets of baked

baked yams, and some cocoa-nuts. But we found that instead of his entertaining us, we were to entertain him; the property of the feast being entirely transferred to us, as his guests, and we were to dispose of it as we pleased. The same person who cleaned the hog in the morning, now cut it up (but not before we desired him) in a very dexterous manner, with a knife of split bamboo; dividing the several parts, and hitting the joints with a quickness and skill that surprised us very much. The whole was set down before us, though at least fifty pounds weight, until we took a small piece away, and desired that they would share the rest amongst the people sitting round. But it was not without a great many scruples they did that at last; and then they asked what particular persons they should give it to. However they were very well pleased when they found that it was not contrary to any custom of ours: some carrying off the portion they had received, and others eating it upon the spot. It was with great difficulty that we could prevail upon Futtafaihe himself to eat a small bit.

In the evening we had a pig, dressed in the same manner as the hog, with yams and cocoa-nuts, brought for supper; and Futtafaihe, finding that we did not like the scruples they had made before to accept of any part of the entertainment, asked us immediately to share it and give it to whom we pleased. When supper was over, abundance of cloth was brought for us to sleep in; but we were a good deal disturbed by a singular instance of luxury, in which their principal men indulge themselves; that of being beat while they are asleep. Two women sat by Futtafaihe, and performed this operation, which is called *tooge tooge*, by beating briskly on his body and legs with both fists, as on a drum, till he fell asleep, and continuing it the whole night, with some short intervals. When once the person is asleep, they abate a little in the strength and quickness of beating; but resume it, if they observe any appearance of his awaking. In the morning we found that Futtafaihe's women relieved each other, and went to sleep by turns. In any other country it would be supposed that such a practice would put an end to all rest; but here it certainly acts as an opiate; and is a strong proof of what habit may effect. The noise of this, however, was not the only thing that kept us awake; for the people, who passed the night in the house, not only conversed among each other frequently, as in the day; but all got up before it was light, and made a hearty meal on fish and yams, which were brought to them by a person who seemed to know very well the appointed time for this nocturnal refreshment.

Next morning we set out with Futtafaihe, and walked down the east side of the bay to the point. We found that, in travelling, Futtafaihe, exercised a power, though by no means wantonly, which pointed out the great authority of such principal men; or is, perhaps, only annexed to those of the royal family. For he sent to one place for fish; to another for yams; and so on at other places; and all his orders were obeyed with the greatest readiness, as if he had been absolute master of the people's property. On coming to the point, the natives mentioned something of one, who they said had been fired at by some of our people; and upon our wishing to see him, they conducted us to a house, where we found a man who had been shot through the shoulder, but not dangerously; as the ball had entered a little above the inner part of the collar-bone, and passed out obliquely backward. We were sure, from the state of the wound, that he was the person who had been fired at by one of the sentinels three days before; though positive orders had been given that none of them should load their pieces with any thing but small shot. We gave some directions to his friends how to manage the wound, to which no application had been made; and they seemed pleased when we told them it would get well in a certain time.

I had

I had prolonged my stay at this island on account of the approaching eclipse; but on the 2d of July, on looking at the micrometer belonging to the Board of Longitude, I found some of the rack-work broken, and the instrument useless till repaired; which there was not time to do before it was intended to be used. Preparing now for our departure, I got on board this day all the cattle, poultry, and other animals, except such as were destined to remain.

The next day we took up our anchor, and moved the ships behind Pangimodoo, that we might be ready to take the advantage of the first favourable wind to get through the narrows. The King, who was one of our company this day at dinner, I observed, took particular notice of the plates. This occasioned me to make him an offer of one, either of pewter or of earthenware. He chose the first; and then began to tell us the several uses to which he intended to apply it. Two of them are so extraordinary, that I cannot omit mentioning them. He said that whenever he should have occasion to visit any of the other islands, he would leave this plate behind him at Tongataboo, as a sort of representative in his absence, that the people might pay it the same obedience they do to himself in person. He was asked what had been usually employed for this purpose before he got this plate; and we had the satisfaction of learning from him, that this singular honour had hitherto been conferred on a wooden bowl, in which he washed his hands. The other extraordinary use to which he meant to apply it in the room of his wooden bowl was, to discover a thief. He said that when any thing was stolen, and the thief could not be found out, the people were all assembled together before him, when he washed his hands in water in this vessel; after which it was cleaned, and then the whole multitude advanced, one after another, and touched it in the same manner that they touch his foot, when they pay him obedience. If the guilty person touched it, he died immediately upon the spot; not by violence, but by the hand of Providence; and if any one refused to touch it, his refusal was a clear proof that he was the man.

In the morning of the 5th, the day of the eclipse, the weather was dark and cloudy, with showers of rain, so that we had little hopes of an observation. About nine o'clock the sun broke out at intervals for about half an hour; after which it was totally obscured, till within a minute or two of the beginning of the eclipse. We were all at our telescopes, viz. Mr. Bayly, Mr. King, Captain Clerke, Mr. Bligh, and myself. I lost the observation by not having a dark glass at hand, suitable to the clouds that were continually passing over the sun; and Mr. Bligh had not got the sun into the field of his telescope; so that the commencement of the eclipse was only observed by the other three gentlemen.

As soon as we knew the eclipse to be over, we packed up the instruments, and sent every thing on board that had not been already removed. As none of the natives had taken the least notice or care of the three sheep, allotted to Marcewagee, I ordered them to be carried back to the ships. I was apprehensive that if I had left them here, they ran great risk of being destroyed by dogs. That animal did not exist upon this island, when I first visited it in 1773; but I now found they had got a good many, partly from the breed then left by myself, and partly from some imported since that time, from an island not very remote, called Feejee.

The general appearance of the country conveys to the spectator an idea of the most exuberant fertility, whether we respect the places improved by art, or those still in a natural state. At a distance the surface seems entirely clothed with trees of various sizes; the tall cocoa-palms are far from being the smallest ornament to any country that produces them. The bogoo, which is a species of fig, with narrow pointed leaves,

is the largest-sized tree of the island; the basis of which, as far as we know, is entirely a coral rock.

Of cultivated fruits, the principal are the plantains; of which fruit they have fifteen different sorts or varieties; bread-fruit; two sorts of fruit found at Otaheite, and known there under the names of jambo and eeeve, the latter a kind of plum; and vast numbers of shadocks, which, however, are found as often in a natural state as planted. Besides vast numbers of cocoa-nut trees, they have three other sorts of palms. There is plenty of excellent sugar-cane, which is cultivated; gourds; bamboo; turmeric; and a species of fig, about the size of a small cherry, called matte, which, though wild, is sometimes eaten. The catalogue of uncultivated plants is too large to be enumerated.

The only quadrupeds, besides hogs, are a few rats and some dogs. Fowls, which are of a large breed, are domesticated here.

Amongst the birds are parrots, somewhat smaller than the common grey ones: paroquets, not larger than a sparrow, of a fine yellowish green, with bright azure on the crown of the head, and the throat and belly red.

There are owls about the size of our common sort, but of a finer plumage; the cuckoos, mentioned in Palmerston's Island; king-fishers, about the size of a thrush, of a greenish blue, with a white ring about the neck. The other land-birds are rails, of a variegated colour; large violet-coloured coots, with red bald crowns; two sorts of fly-catchers; a very small swallow; and three sorts of pigeons.

Of water-fowl, and such as frequent the sea, are ducks; blue and white herons; tropic birds; common noddies; white terns; a new species of a leaden colour, with a black crest; a small bluish curlew; and a large plover spotted with yellow. Besides the large bats, mentioned before, there is also the common sort.

The only noxious or disgusting animals of the reptile or insect tribe, are sea-snakes, three feet long, with black and white circles alternately, often found on shore; some scorpions and centipedes.

The sea abounds with fish, though the variety is less than might be expected. The most frequent sorts are mullets; several sorts of parrot-fish; silver fish, old wives; some beautifully spotted soles; also sharks; and some curious devil-fish.

The many reefs and shoals on the north side of the island, afford shelter for an endless variety of shell-fish; such as the true hammer-oyster; panamas; cones; and a sort of gigantic cockle. There are likewise several sorts of sea-eggs, and many very fine star-fish; besides a considerable variety of corals.

On July 26th we were ready to sail; but the wind being easterly, we were under a necessity of waiting two or three days. On the 8th, in the morning, I walked out and visited several chiefs; all of them were taking their morning draught or had already taken it. The King I found asleep in a small retired hut, with two women tapping on his breech. About eleven o'clock he arose, and then some fish and yams, which tasted as if they had been stewed in cocoanut milk, were brought to him. Of these he ate a large portion, and lay down once more to sleep. I now left him, and carried to the Prince a present of cloth, beads, and other articles, which I had brought with me from the ship for the purpose. There was a sufficient quantity of cloth to make him a complete suit; and he was immediately decked out with it. Proud of his dress, he first went to shew himself to his father; and then conducted me to his mother; with whom were about ten or a dozen other women of a respectable appearance. Here the Prince changed his apparel, and made me a present of two pieces of the cloth manufactured in the island. By this time it was past noon, when by appointment I repaired

I repaired to the palace to dinner. Several of our gentlemen were invited to the feast, which was presently served up, and consisted of two pigs and yams. I roused the drowsy monarch to partake of what he had provided for our entertainment. In the mean time two mullets and some shell-fish were brought to him, as I supposed, for his separate portion. But he joined it to our fare, sat down with us, and made a hearty meal.

On the 10th, at eight o'clock in the morning, we weighed anchor, and with a steady gale at south-east, turned through the channel, between the small isles called Makkahaa and Monooafai, it being much wider than the channel between the last-mentioned island and Pangimodoo. Finding that we could not get to sea before it was dark, I came to an anchor, under the shore of Tongataboo, in forty-five fathoms water.

We remained at this station till eleven o'clock the next day, when we weighed, and plied to the eastward. But it was ten at night before we weathered the east end of the island, and were enabled to stretch away for Middleburgh, or Eooa, (as it is called by the inhabitants,) where we anchored at eight o'clock the next morning.

We had no sooner anchored than Taoofa, the chief, and several other natives, visited us on board, and seemed to rejoice much at our arrival. This Taoofa knew me when I was here during my last voyage; consequently we were not strangers to each other. In a little time I went ashore with him, in search of fresh water; the procuring of which was the chief object that brought me to Eooa. I was first conducted to a brackish spring, between low and high water-mark, amongst rocks, in the cove where we landed. Finding that we did not like this, our friends took us a little way into the island; where, in a deep chasm, we found very good water. But rather than undertake the tedious task of bringing it down to the shore, I resolved to rest contented with the supply the ships had got at Tongataboo.

I put ashore, at this island, the ram and two ewes, of the Cape of Good Hope breed; intrusting them to the care of Taoofa, who seemed proud of his charge. Eooa, not having as yet got any dogs upon it, seems to be a more proper place than Tongataboo for the rearing of sheep.

As we lay at anchor, this island bore a very different aspect from any we had lately seen, and formed a most beautiful landscape.

The 13th, in the afternoon, a party of us made an excursion to the highest part of the island, which was a little to the right of our ships, in order to have a full view of the country. About half-way up we crossed a deep valley, the bottom and sides of which, though composed of hardly any thing but coral rock, were clothed with trees. We were now about two or three hundred feet above the level of the sea, and yet even here the coral was perforated into all the holes and inequalities which usually diversify the surface of this substance within the reach of the tide.

From the elevation to which we had ascended, we had a full view of the whole island, except a part of the south point. The plains and meadows, of which there are here some of great extent, lie all on the north-west side; and, as they are adorned with tufts of trees, intermixed with plantations, they form a very beautiful landscape, in every point of view. While I was surveying this delightful prospect, I could not help flattering myself with the pleasing idea that some future navigators may, from the same station, behold these meadows stocked with cattle, brought to these islands by the ships of England; and that the completion of this single benevolent purpose, independently of all other considerations, would sufficiently mark to posterity that our voyages had not been useless to the general interests of humanity.



Omai, who was a great favourite, was tempted with the offer of being made chief of this island, if he would have staid amongst them; and it is not clear to me, that he would not have been glad to stay, if the scheme had met with my approbation. I own I did disapprove of it; but not because I thought that Omai would do better for himself in his own native isle.

On returning from my country expedition, we were informed that a party of the natives had, in the circle where our people traded, struck one of their own countrymen with a club, which laid bare, or, as others said, fractured his skull, and then broke his thigh with the same. On my asking the reason of so severe a treatment, we were informed, that he had been discovered in a situation rather indelicate with a woman who was taboo'd. We, however, understood that she was no otherwise taboo'd, than by belonging to another person, and rather superior in rank to her gallant. From this circumstance we had an opportunity of observing how these people treat such infidelities. But the female sinner has by far the smaller share of punishment for her misdemeanour; as they told us, that she would only receive a slight beating.

The next morning, I planted a pine-apple, and sowed the seeds of melons, and other vegetables in the chief's plantation. I had some encouragement indeed to flatter myself that my endeavours of this kind would not be fruitless; for this day there was served up at my dinner a dish of turnips, being the produce of the seeds I had left during my last voyage.

I had fixed on the 15th for sailing, till Taoofoa pressed me to stay a day or two longer, to receive a present he had prepared for me.

Accordingly, the next day, July 16th, I received the chief's present, consisting of two small heaps of yams and some fruit, which seemed to be collected by a kind of contribution, as at the other isles. It was intended to have finished the day with the bomai, or night-dance; but an accident prevented any of us from staying ashore to see it. One of my people, walking a very little way, was surrounded by twenty or thirty of the natives, who knocked him down, and stripped him of every thing he had on his back. On hearing of this, I immediately seized two canoes, and a large hog; and insisted on Taoofoa's causing the cloaths to be restored, and on the offenders being delivered up to me. The chief seemed much concerned at what had happened; and forthwith took the necessary steps to satisfy me. It was not long before one of the offenders was delivered up, and a shirt and a pair of trowsers restored.

The next morning, I landed again, having provided myself with a present for Taoofoa, in return for what he had given me. The remainder of the cloaths were now brought in; but as they had been torn off the man's back by pieces, they were not worth carrying on board. Taoofoa, on receiving my present, shared it with three or four other chiefs, keeping only a small part for himself. I remained with them till they had finished their bowl of kava; and having then paid for the hog, which I had taken the day before, returned on board with Taoofoa, and one of Poulaho's servants, by whom I sent as a parting mark of my esteem and regard for that chief, a piece of bar iron, being as valuable a present as any I could make.

Soon after we weighed; when Taoofoa, and a few other natives that were in the ship, left us. On heaving up the anchor, we found that the cable had suffered considerably by the rocks.

Thus we took leave of the Friendly islands, after a stay of near three months; during which time we lived together in the most cordial friendship. Some accidental differences, it is true, now and then happened, owing to their great propensity to  
thieving;

thieving; but too often encouraged by the negligence of our own people. The time employed amongst them was not thrown away. We expended very little of our sea provisions; subsisting in general upon the produce of the island while we stayed, and carrying away with us a quantity of refreshments sufficient to last till our arrival at another station, where we could depend upon a fresh supply. I was not sorry, besides, to have had an opportunity of bettering the condition of these good people, by leaving the useful animals before-mentioned among them; and at the same time, those designed for Otaheite received fresh strength in the pastures of Tongataboo.

But besides the immediate advantages which both the natives of the Friendly islands, and ourselves, received by this visit, future navigators from Europe, if any such ever tread our steps, will profit by the knowledge I acquired of the geography of this part of the Pacific Ocean; and the more philosophical reader, who loves to view human nature in new situations, and to speculate on singular, but faithful, representations of the persons, the customs, the arts, the religion, the government, and the language of uncultivated man, in remote and fresh discovered quarters of the globe, will perhaps find matter of amusement, if not of instruction, in the information which I have been enabled to convey to him concerning the inhabitants of this Archipelago. I shall suspend my narrative of the progress of the voyage, while I faithfully relate what I had opportunities of collecting on these several topics.

We found, by our experience, that the best articles for traffic at these islands are iron tools in general. Axes and hatchets; nails, from the largest spike down to ten-penny ones; rasps, files, and knives, are much sought after. Red cloth, and linen, both white and coloured, looking-glasses and beads are also in estimation, but of the latter, those that are blue, are preferred to all others, and white ones are thought the least valuable. A string of large blue beads would at any time purchase a hog. But it must be observed, that such articles as are merely ornaments, may be highly esteemed at one time, and not so at another. When we first arrived at Annamooka, the people there would hardly take them in exchange even for fruit; but when Feenou came, this great man set the fashion, and brought them into vogue, till they rose in their value to what I have just mentioned.

In return for the favourite commodities which I have enumerated, all the refreshments may be procured that the islands produce. These are, hogs, fowls, fish, yams, bread-fruit, plantains, cocoa-nuts, sugar-cane, and, in general, every such supply as can be met with at Otaheite, or any of the Society islands. The yams of the Friendly islands are excellent, and, when grown to perfection, keep very well at sea. But their pork, bread-fruit, and plantains, though far from despicable, are nevertheless much inferior in quality to the same articles at Otaheite, and its neighbourhood.

According to the information that we received there, this Archipelago is very extensive: above one hundred and fifty islands were reckoned up to us by the natives, who made use of bits of leaves to ascertain their number.

Feejee, as we were told, lies three days' sail from Tongataboo, in the direction of north-west-by-west. It was described to us as a high but very fruitful island; abounding with hogs, dogs, fowls, and all the kinds of fruit and roots that are found in any of the others; and as much larger than Tongataboo. Feejee and Tongataboo frequently make war upon each other. The people of Feejee are formidable on account of the dexterity with which they use their bows and slings; but much more so on account of the savage practice of eating their enemies whom they kill in battle.

Now that I am again led to speak of cannibals, let me ask those who maintain that the want of food first brings men to feed on human flesh, what is it that induceth

the Feejee people to this practice in the midst of plenty? It is detested very much by those of Tongataboo, who cultivate the friendship of their savage neighbours of Feejee, apparently out of fear; though they sometimes venture to skirmish with them, on their own ground, and carry off red feathers, as their booty, which are in great plenty there, and, as has been frequently mentioned, are in great estimation amongst our Friendly islanders. It appeared to me, that the Feejee men, whom we now saw, were much respected here; they seem to excel the inhabitants of Tongataboo in ingenuity, if we might judge from several specimens of their skill in workmanship which we saw; such as clubs and spears, which were carved in a masterly manner; cloth beautifully chequered; variegated mats; earthen pots; and some other articles; all which had a cast of superiority in the execution.

I have mentioned that Feejee lies three days' sail from Tongataboo, because these people have no other method of measuring the distance from island to island, but by expressing the time required to make the voyage in one of their canoes. In order to ascertain this with some precision, or at least to form some judgment how far these canoes can sail in a moderate gale in any given time, I went on board one of them, when under sail, and by several trials with the log, found that she went seven knots, or miles in an hour, closed hauled, in a gentle gale. From this I judge that they will sail, on a medium, with such breezes as generally blow in their seas, about seven or eight miles in an hour.

In our inquiries we found poor Onai very deficient as an interpreter; for unless the object or thing we wanted to inquire about was actually before us, it was difficult to gain a tolerable knowledge of it; for having no curiosity, he never gave himself the trouble to make remarks for himself; and when he was disposed to explain matters to us, his ideas appeared to be so limited, and perhaps so different from ours, that his accounts were often so confused as to perplex, instead of instructing us. Add to this, that it was very rare that we found amongst the natives, a person who united the ability and the inclination to give us the information we wanted. Under these disadvantages, it is not surprising that we should not be able to bring away with us satisfactory accounts of many things; but some of us endeavoured to remedy those disadvantages by diligent observation; and I am indebted to Mr. Anderson for a considerable share of what follows.

The natives of the Friendly islands seldom exceed the common stature (though we have measured some who were above six feet), but are very strong and well made; especially as to their limbs. They are generally broad about the shoulders; and though the muscular disposition of the men, which seems a consequence of much action, rather conveys the appearance of strength than of beauty, there are several to be seen who are really handsome.

We met with hundreds of truly European faces, and many genuine Roman noses amongst them. Their eyes and teeth are good; but the last neither so remarkably white, nor so well set as is often found amongst Indian nations.

The women are not so much distinguished from the men by their features as by their general form, which is for the most part destitute of that strong fleshy firmness that appears in the latter. Though the features of some are so delicate, as not only to be a true index of their sex, but to lay claim to a considerable share of beauty and expression, for the bodies and limbs of most of the females are well proportioned; and some absolutely perfect models of a beautiful figure. But the most remarkable distinction in the women, is the uncommon smallness and delicacy of their fingers, which may be put in competition with the finest in Europe.

The general colour is a cast deeper than the copper brown ; but several of the men and women have a true olive complexion ; and some of the last are even a great deal fairer. We saw a man and boy at Hapace, and a child at Annamooka, perfectly white. Such have been found amongst all black nations ; but I apprehend that their colour is rather a disease than a natural phenomenon.

There are, upon the whole, few natural defects or deformities to be found amongst them. The most common of which is the tetter, or ring-worm, that seems to affect almost one half of them, and leaves whitish serpentine marks every where behind it ; but this is of less consequence than another which is very frequent, and appears on every part of the body. I had the mortification to learn that all the care I took, when I first visited these islands, to prevent the venereal disease from being communicated to the inhabitants, had proved ineffectual. What is extraordinary, they do not seem to regard it much ; and as we saw few signs of its destroying effects, probably the climate, and the way of living of these people, greatly abate its virulence. There are two other complaints frequent amongst them ; one of which is an indolent firm swelling, that affects the legs and arms, and increases them to an extraordinary size in their whole length. The other is a tumour of the same sort, in the testicles, which sometimes exceeds the size of the two fists. But in other respects they may be considered as uncommonly healthy ; not a single person having been seen, during our stay, confined to the house by sickness of any kind. On the contrary, their strength and activity are every way answerable to their muscular appearance ; and they exert both, in their usual employment and in their diversions, in such a manner, that there can be no doubt of their being, as yet, little debilitated by the numerous diseases that are the consequence of indolence, and an unnatural method of life.

The graceful air and firm step with which these people walk, are not the least obvious proofs of their personal accomplishments.

Their countenances very remarkably express the abundant mildness, or good-nature, which they possess ; and are entirely free from that savage keenness which marks nations in a barbarous state. They are frank, cheerful, and good-humoured, though sometimes, in the presence of their chiefs, they put on a degree of gravity, and such a serious air as becomes stiff and awkward, and has an appearance of reserve.

Their peaceable disposition is sufficiently evinced from the friendly reception all strangers have met with who have visited them. Instead of offering to attack them openly or clandestinely, as has been the case with most of the inhabitants of these seas, they have never appeared in the smallest degree hostile ; but on the contrary, like the most civilized people, have courted an intercourse with their visitors by bartering, which is the only medium that unites all nations in a sort of friendship. Upon the whole, they seem possessed of many of the most excellent qualities that adorn the human mind ; such as industry, ingenuity, perseverance, affability, and perhaps other virtues which our short stay with them might prevent our observing.

The only defect vitiating their character, that we know of, is a propensity to thieving ; to which we found those of all ages, and both sexes, addicted, and to an uncommon degree. Great allowances should be made for the foibles of these poor natives of the Pacific Ocean, whose minds we overpowered with the glare of objects, equally new to them, as they were captivating. The thefts so frequently committed by the natives, of what we had brought along with us, may be said to arise solely from an intense curiosity or desire to possess something which they had not been accustomed to before, and belonging to a sort of people so different from themselves. That I have assigned the true motive for their propensity to this practice, appears from their stealing every

every thing indiscriminately at first sight, before they could have the least conception of converting their prize to any one useful purpose. Upon the whole, the pilfering disposition of these islanders, though certainly disagreeable and troublesome to strangers, was the means of affording us some information as to the quickness of their intellects. Their small thefts were committed with much dexterity; and those of greater consequence upon a plan suited to the importance of the objects.

Their hair is in general straight, thick, and strong; though a few have it bushy or frizzled. The natural colour, I believe, almost without exception, is black; but the greatest part of the men, and some of the women, have it stained of a brown or purple colour, and a few of an orange cast.

When I first visited these islands, I thought it had been an universal custom for both men and women to wear the hair short; but during our present longer stay we saw a great many exceptions. Some have it cut off on one side of the head only; others have it entirely cut off, except a single lock; the women in general wear it short. The men have their beards cut short; and both men and women strip the hair from the arm-pits. The men are stained from about the middle of the belly to about half way down the thighs, with a deep blue colour. The women have only a few small lines or spots, thus imprinted, on the inside of their hands. Their Kings, as a mark of distinction, are exempted from this custom.

The men are all circumcised, or rather supercised, as the operation consists in cutting off only a small piece of the foreskin at the upper part; which, by that means, is rendered incapable ever after of covering the glans. This is all they aim at, as they say the operation is practised from a notion of cleanliness.

The dress of both men and women is the same; and consists of a piece of cloth or matting (but mostly the former), about two yards wide, and two and a half long; at least so long as to go once and a half round the waist, to which it is confined by a girdle or cord. It is double before, and hangs down like a petticoat, as low as the middle of the leg. The upper part of the garment above the girdle is platted into several folds, so that, when unfolded, there is cloth sufficient to draw up and wrap round the shoulders, which is very seldom done. The inferior sort are satisfied with small pieces; and very often wear nothing but a covering made of leaves of plants, or the maro, which is a narrow piece of cloth, or matting, like a sash. This they pass between the thighs and wrap round the waist; but the use of it is chiefly confined to the men.

The ornaments worn by both sexes are necklaces, made of the fruit of the pandanus, and various sweet smelling flowers, which go under the general name of kahulla. Others are composed of small shells, the wing and leg bones of birds, shark's teeth, and other things; all which hang loose upon the breast; rings of tortoise-shell on the fingers; and a number of these joined together as bracelets on the wrist.

The lobes of the ears (though most frequently, only one) are sometimes perforated with two holes, in which they wear cylindrical bits of ivory about three inches long.

Cleanliness induces them to bathe in the ponds, which seem to serve for no other purpose. They are sensible that salt water hurts their skin, and when necessity obliges them to bathe in the sea, they commonly have some cocoa-nut shells, filled with fresh water, poured over them, to wash it off. People of superior rank use cocoa-nut oil, which improves the appearance of the skin very much.

The employment of the women is of the easy kind, and, for the most part, such as may be executed in the house. The manufacturing their cloth is wholly consigned to their care. Having already described the process, I shall only add that they have this  
cloth

cloth of different degrees of fineness. Of the better sort they have some that is striped and chequered, and of other patterns differently coloured. But how these colours are laid on, I cannot say, as I never saw any of this sort made. It will resist water for some time ; but that which has the strongest glaze will resist longest.

The manufacture next in consequence, and also within the department of the women, is that of their mats, which excel every thing I have seen at any other place, both as to their texture and their beauty. There are many other articles of less note, that employ the spare time of their females ; as combs, of which they make vast numbers ; and little baskets with small beads ; but all finished with such neatness and taste in the disposition of the various parts, that a stranger cannot help admiring their assiduity and dexterity.

The province allotted to the men, as might be expected, is far more laborious and extensive than that of the women. Agriculture, architecture, boat-building, fishing, and other things that relate to navigation, are the objects of their care. Cultivated roots and fruits being their principal support, this requires their constant attention to agriculture, which they pursue very diligently, and seem to have brought almost to as great perfection as circumstances will permit. In planting the plantains and yams, they observe so much exactness, that, which-ever way you look, the rows present themselves regular and complete.

The cocoa-nut and bread-fruit trees are scattered about without any order, and seem to give them no trouble after they have attained a certain height.

It is remarkable, that these people, who in many things display much taste and ingenuity, should shew little of either in building their houses. Those of the lower people are poor huts, and very small ; those of the better sort are larger and more comfortable. The dimensions of one of a middling size, are about thirty feet long, twenty broad, and twelve high. Their house is, properly speaking, a thatched roof or shed, supported by posts and rafters, disposed in a very judicious manner. The floor is raised with earth, smoothed, and covered with strong, thick matting, and kept very clean. A thick strong mat, about two and one half, or three feet broad, bent into the form of a semicircle, and set upon its edge, with the ends touching the side of the house, in shape resembling the fender of a fire-hearth, incloses a space for the master and mistress of the family to sleep in. The rest of the family sleep upon the floor, wherever they please to lie down ; the unmarried men and women apart from each other. Or if the family be large, there are small huts adjoining, to which the servants retire in the night ; so that privacy is as much observed here, as one could expect. The cloaths that they wear in the day, serve for their covering in the night. Their whole furniture consists of a bowl or two, in which they make kava ; a few gourds ; cocoa-nut shells ; and some small wooden stools, which serve them for pillows.

They make amends for the defects of their houses by their great attention to and dexterity in naval architecture, if I may be allowed to give it that name : but I refer to the narrative of my last voyage for an account of their canoes and their manner of building and navigating them.

The only tools which they use to construct their boats, which are very dexterously made, are hatchets, or rather thick adzes, of a smooth black stone that abounds at Toofoa ; augres made of shark's teeth, fixed on small handles, and rasps of a rough skin of a fish, fastened on flat pieces of wood, thinner on one side, which also have handles.

The cordage is made from the fibres of the cocoa-nut husk, which, though not more than nine or ten inches long, they plait, about the size of a quill, or less, to any length

that they please, and roll it up in balls, from which the larger ropes are made by twisting several of these together. The lines that they fish with, are as strong and even as the best cord we make, resembling it almost in every respect. Their other fishing implements are large and small hooks made of pearl-shell.

Their weapons are clubs of different sorts (in the ornamenting of which they spend much time), spears, and darts. They have also bows and arrows; but these seem to be designed only for amusement, such as shooting at birds, and not for military purposes. The stools are about two feet long, but only four or five inches high, and near four broad, bending downward in the middle, with four flaring legs, and circular feet; the whole made of one piece of black or brown wood, neatly polished, and sometimes inlaid with bits of ivory.

Yams, plantains, and cocoa-nuts, compose the greatest part of their vegetable diet. Of their animal food, the chief articles are hogs, fowls, fish, and all sorts of shell-fish; but the lower people eat rats. The two last vegetable articles, with bread-fruit, are what may be called the basis of their food, at different times of the year, with fish and shell-fish; for hogs, fowls, and turtle, seem only to be occasional dainties, reserved for their chiefs.

Their food is, generally, dressed by baking, and they have the art of making, from different kinds of fruit, several dishes which most of us esteemed very good. The generality of them lay their victuals upon the first leaf they meet with, however dirty it may be; but when food is served up to the chiefs, it is commonly laid upon green plantain leaves. The women are not excluded from eating with the men; but there are certain ranks or orders amongst them that can neither eat nor drink together. This distinction begins with the King; but where it ends I cannot say.

They seem to have no set time for meals. They go to bed as soon as it is dark, and rise with the dawn in the morning.

Their private diversions are chiefly singing, dancing, and music, performed by the women. The dancing of the men has a thousand different motions with the hands, to which we are entire strangers; and they are performed with an ease and grace which are not to be described but by those who have seen them.

Whether their marriages be made lasting by any kind of solemn contract, we could not determine with precision; but it is certain that the bulk of the people satisfied themselves with one wife. The chiefs, however, have commonly several women; though some of us were of opinion that there was only one that was looked upon as the mistress of the family.

As female chastity, at first sight, seemed to be held in no great estimation, we expected to have found frequent breaches of their conjugal fidelity; but we did them great injustice. I do not know that a single instance happened during our whole stay. Neither are those of the better sort that are unmarried, more free of their favours. It is true, there was no want of those of a different character: but they appeared to be of the lowest class, and such of them as permitted familiarities to our people, were prostitutes by profession.

Nothing can be a greater proof of the humanity of these people than the concern they shew for the dead. To use a common expression, their mourning is not in words but deeds. They beat their teeth with stones, strike a shark's tooth into the head until the blood flows in streams, and thrust spears into the inner part of the thigh, into their sides below the arm-pits, and through the cheeks into the mouth. All these operations convey an idea of such rigorous discipline, as must require either an uncommon degree of affection, or the grossest superstition to exact. It should be observed



observed, however, that the more painful operations are only practised on account of the death of those most nearly connected. The common people are interred in no particular spot.

Their long and general mourning proves that they consider death as a very great evil. And this is confirmed by a very odd custom which they practise to avert it. They suppose that the Deity will accept of the little finger, as a sort of sacrifice efficacious enough to procure the recovery of their health. They cut it off with one of their stone hatchets. There was scarcely one in ten of them whom we did not find thus mutilated, in one or both hands; which has a disagreeable effect, especially as they sometimes cut so close that they encroach upon the bone of the hand which joins to the amputated finger\*.

They seem to have little conception of future punishment. They believe however that they are justly punished upon earth; and consequently use every method to render their divinities propitious. The supreme author of most things they call Kollasfootonga; who they say is a female, residing in the sky, and directing the thunder, wind, rain, and in general all the changes of weather. They believe that when she is angry with them, the productions of the earth are blasted; that many things are destroyed by lightning; and that they themselves are afflicted with sickness and death as well as their hogs and other animals.

When this anger abates, they suppose that every thing is restored to its natural order. They also admit a plurality of deities, though all inferior to Kollasfootonga. Amongst them they mention Toofocaboolootoo, god of the clouds and fog; Talletcboo and some others residing in the heavens. The first in rank and power, who has the government of the sea and its productions, is called Futtasaihe, who they say is a male, and has for his wife Fykava Kajeca. But their notions of the power, and other attributes of these beings, are so very absurd, that they suppose they have no farther concern with them after death.

They have, however, very proper sentiments about the immateriality and the immortality of the soul. They call it life, the living principle, or, what is more agreeable to their notions of it, an Otoo; that is, a divinity, or invisible being.

Of the nature of their government, we know no more than the general outline. Some of them told us, that the power of the King is unlimited, and that the life and property of the subject are at his disposal; and we saw instances enough to prove that the lower order of people have no property, nor safety for their persons, but at the will of the chiefs to whom they respectively belong.

When any one wants to speak with the King, or chief, he advances and sits down before him with his legs across; which is a posture to which they are so much accustomed, that any other mode of sitting is disagreeable to them†.

To speak to the King standing, would be accounted here as a striking mark of rudeness.

Though some of the more potent chiefs may vie with the King in point of actual possessions, they fall very short in rank and in certain remarks of respect, which the collective body have agreed to pay the monarch. It is a particular privilege annexed to his sovereignty, not to be punctured nor circumscribed as all his subjects are. When-

\* It may not be improper to mention here, on the authority of Captain King, that it is common for the inferior people to cut off a joint of their little finger, on account of the sickness of the chiefs to whom they belong.

† This is peculiar to the men, the women always sitting with both legs thrown a little on one side. We owe this remark to Captain King.

ever he walks out, every one whom he meets must sit down till he has passed. No one is allowed to be over his head ; on the contrary, all must come under his feet ; for there cannot be a greater outward mark of submission, than that which is paid to the sovereign, and other great people of these islands, by their inferiors. The method is this ; the person who is to pay obeisance, squats down before the chief, and bows the head to the sole of his foot ; which, when he sits, is so placed that it cannot easily be come at ; and having tapped or touched it with the under and upper side of the fingers of both hands, he rises up, and retires. The hands after this application of them to the chief's feet, are in some cases rendered useless for a time ; for until they be washed they must not touch any kind of food. When the hands are in this state, they call it Taboo Rema. Taboo, in general, signifies forbidden, and Rema is their word for hand.

Taboo, as I have before observed, is a word of an extensive signification. Human sacrifices are called Tangata taboo and when any thing is forbidden to be eat, or made use of, they say that is Taboo.

The language of the Friendly Islands has the greatest affinity imaginable to that of New Zealand, of Wateoo, and Mangeea ; and consequently to that of Otaheite, and the Society Islands.

Having now concluded my remarks on these islands and people, I shall take my leave of them.

\* \* The voyage to the north-west coast of America belongs to another division of this work.

### PART III.

*Captain King's Journal of the Transactions on returning to the Sandwich Islands, together with a minute Account of Captain Cook's Death, from January 1779 to March following.*

KARAKAKOOA Bay is situated on the west side of the island of Owhyhee, in a district called Akona. It is about a mile in depth, and bounded by two low points of land at the distance of half a league, and bearing south-south-east north-north-west from each other. On the north point, which is flat and barren, stands the village of Kowrowa ; and in the bottom of the bay, near a grove of tall cocoa-nut trees, there is another village of a more considerable size, called Kakooa. This bay appearing to Captain Cook a proper place to refit the ships, and lay in an additional supply of water and provisions, we moored on the north side.

As soon as the inhabitants perceived our intention of anchoring in the bay, they came off from the shore in astonishing numbers, and expressed their joy by singing and shouting, and exhibiting a variety of wild and extravagant gestures. The sides, the decks, and rigging of both ships were soon completely covered with them ; and a multitude of women and boys, who had not been able to get canoes, came swimming round us in shoals ; many of whom, not finding room on board, remained the whole day playing in the water.

Among the chiefs that came on board the Resolution, was a young man called Pareea, whom we soon perceived to be a person of great authority. On presenting himself to Captain Cook, he told him that he was Jakanee\* to the King of the island, who was

\* We afterward met with several others of the same denomination ; but whether it be an office, or some degree of affinity, we could never learn with certainty.

at that time engaged on a military expedition at Mowee, and was expected to return within three or four days. A few presents from Captain Cook attached him entirely to our interests, and he became exceedingly useful to us in the management of his countrymen, as we had soon occasion to experience: for we had not been long at anchor, when it was observed that the *Discovery* had such a number of people hanging on one side, as occasioned her to heel considerably; and that the men were unable to keep off the crowds which continued pressing into her. Captain Cook, being apprehensive that she might suffer some injury, pointed out the danger to Pareea, who immediately went to their assistance, cleared the ship of its incumbrances, and drove away the canoes that surrounded her.

The authority of the chiefs over the inferior people appeared from this incident, to be of the most despotic kind. A similar instance of it happened the same day on board the *Resolution*, where the crowd being so great as to impede the necessary business of the ship, we were obliged to have recourse to the assistance of Kaneena, another of their chiefs, who had likewise attached himself to Captain Cook. The inconvenience we laboured under being made known, he immediately ordered his countrymen to quit the vessel; and we were not a little surprised to see them jump overboard without a moment's hesitation; all, except one man, who loitered behind, and shewing some unwillingness to obey, Kaneena took him up in his arms, and threw him into the sea.

Both these chiefs were men of strong and well proportioned bodies, and of countenances remarkably pleasing, Kaneena, especially, was one of the finest men I ever saw. He was about six feet high, had regular and expressive features, with lively dark eyes; his carriage was easy, firm, and graceful.

The inhabitants had hitherto behaved with great fairness and honesty, but we now found the case exceedingly altered. The immense crowd of islanders, which blocked up every part of the ships, not only afforded frequent opportunity of pilfering without risk of discovery, but our inferiority in number held forth a prospect of escaping with impunity in case of detection. Another circumstance, to which we attributed this alteration in their behaviour, was the presence and encouragement of their chiefs; for generally tracing the booty into the possession of some men of consequence, we had the strongest reason to suspect that these depredations were committed at their instigation.

Soon after the *Resolution* had got into her station, our two friends, Pareea and Kaneena, brought on board a third chief, named Koah, who, we were told, was a priest, and had been, in his youth, a distinguished warrior. He was a little old man, of an emaciated figure; his eyes exceedingly sore and red, and his body covered with a white leprous scurf, the effects of an immoderate use of the *Ava*. Being led into the cabin, he approached Captain Cook with great veneration, and threw over his shoulders a piece of red cloth, which he had brought along with him. Then stepping a few paces back, he made an offering of a small pig, which he held in his hand, whilst he pronounced a discourse that lasted for a considerable time. This ceremony was frequently repeated during our stay at Owhyhee, and appeared to us, from many circumstances, to be a sort of religious adoration. Their idols we found always arrayed with red cloth, in the same manner as was done to Captain Cook; and a small pig was their usual offering to the *Eatooas*. Their speeches, or prayers, were uttered too with a readiness and volubility that indicated them to be according to some formulary.

When this ceremony was over, Koah dined with Captain Cook, eating plentifully of what was set before him; but, like the rest of the inhabitants of the islands in these

seas, could scarcely be prevailed on to taste a second time our wine or spirits. In the evening Captain Cook, attended by Mr. Bayly and myself, accompanied him on shore. We landed at the beach, and were received by four men who carried wands tipped with dog's hair, and marched before us, pronouncing with a loud voice a short sentence, in which we could only distinguish the word *Orono*.\* The crowd which had been collected on the shore, retired at our approach; and not a person was to be seen, except a few lying prostrate on the ground, near the huts of the adjoining village.

Before I proceed to relate the adoration that was paid to Captain Cook, and the peculiar ceremonies with which he was received on this fatal island, it will be necessary to describe a *Morai*, or burying-place, situated at the south side of the beach at *Kakooa*. It was a square solid pile of stones, about forty yards long, twenty broad, and fourteen in height. The top was flat and well paved, and surrounded by a wooden rail, on which were fixed the skulls of the captives sacrificed on the death of their chiefs. In the centre of the area, stood a ruinous old building of wood, connected with the rail on each side, by a stone wall, which divided the whole space into two parts. On the side next the country were five poles, upward of twenty feet high, supporting an irregular kind of scaffold; on the opposite side, toward the sea, stood two small houses, with a covered communication.

We were conducted by *Koah* to the top of this pile by an easy ascent, leading from the beach to the north-west corner of the area. At the entrance we saw two large wooden images, with features violently distorted, and a long piece of carved wood, of a conical form inverted, rising from the top of their heads; the rest was without form, and wrapped round with red cloth. We were here met by a tall young man with a long beard, who presented Captain Cook to the images; and, after chanting a kind of hymn, in which he was joined by *Koah*, they led us to that end of the *Morai* where the five poles were fixed. At the foot of them were twelve images ranged in a semi-circular form, and before the middle figure stood a high stand or table, on which lay a putrid hog, and under it pieces of sugar-cane, cocoa-nuts, bread-fruit, plantains, and sweet potatoes. *Koah* having placed the captain under this stand, took down the hog, and held it toward him; and after having a second time addressed him in a long speech, pronounced with much vehemence and rapidity, he let it fall on the ground, and led him to the scaffolding, which they began to climb together, not without great risk of falling. At this time we saw, coming in solemn procession, at the entrance of the top of the *Morai*, ten men carrying a live hog, and a large piece of red cloth. Being advanced a few paces, they stopped, and prostrated themselves; and *Kaireekoa*, the young man above-mentioned, went to them, and receiving the cloth, carried it to *Koah*, who wrapped it round the captain, and afterward offered him the hog, which was brought by *Kaireekoa* with the same ceremony.

Whilst Captain Cook was aloft, in this awkward situation, swathed round with red cloth, and with difficulty keeping his hold amongst the pieces of rotten scaffolding, *Kaireekoa* and *Koah* began their office, chanting sometimes in concert, and sometimes alternately. This lasted a considerable time; at length *Koah* let the hog drop, when he and the captain descended together. He then led him to the images before mentioned, and having said something to each in a sneering tone, snapped his fingers at them as he passed, he brought him to that in the centre, which, from its being covered

\* Captain Cook generally went by this name amongst the natives of *Owhyhee*; but we could never learn its precise meaning. Sometimes they applied it to an invisible being, who they said lived in the heavens. We also found that it was a title belonging to a personage of great rank and power in the island, who resembles pretty much the *Delai Lama* of the *Tartars*, and the ecclesiastical Emperor of Japan.

with red cloth, appeared to be in greater estimation than the rest. Before this figure he prostrated himself, and kissed it; desiring Captain Cook to do the same; who suffered himself to be directed by Koah throughout the whole of this ceremony. We were now led back into the other division of the Morai, where there was a space ten or twelve feet square, sunk about three feet below the level of the area. Into this we descended, and Captain Cook was seated between two wooden idols, Koah supporting one of his arms, whilst I was desired to support the other. At this time arrived a second procession of natives, carrying a baked hog, and a pudding, some bread-fruit, cocoa-nuts, and other vegetables. When they approached us, Kaireekkea put himself at their head, and presenting the pig to Captain Cook in the usual manner, began the same kind of chant as before, his companions making regular responses. We observed that after every response their parts became gradually shorter, till, towards the close, Kaireekkea's consisted of only two or three words, which the rest answered by the word Orono.

When this offering was concluded, which lasted a quarter of an hour, the natives sat down fronting us, and began to cut up the baked hog, to peel the vegetables, and break the cocoa-nuts; whilst others employed themselves in brewing the ava; which is done by chewing it in the same manner as at the Friendly Islands. Kaireekkea then took part of the kernel of a cocoa-nut, which he chewed, and wrapped it in a piece of cloth, rubbed with it the captain's face, head, hands, arms, and shoulders. The ava was then handed round, and after we had tasted it, Koah and Pareea began to pull the flesh of the hog in pieces, and to put it into our mouths. I had no great objection to be fed by Pareea, who was very cleanly in his person; but Captain Cook, who was served by Koah, recollecting the putrid hog, could not swallow a morsel; and his reluctance, as may be supposed, was not diminished, when the old man, according to his own mode of civility, had chewed it for him.

When this last ceremony was finished, which Captain Cook put an end to as soon as he decently could, we quitted the Morai, after distributing amongst the people some pieces of iron and other trifles, with which they seemed highly gratified. The men with wands conducted us to the boats, repeating the same words as before. The people again retired, and the few that remained, prostrated themselves as we passed along the shore. We immediately went on board, our minds full of what we had seen, and extremely well satisfied with the good dispositions of our new friends. The meaning of the various ceremonies, with which we had been received, and which, on account of their novelty and singularity, have been related at length, can only be the subject of conjectures, and those uncertain and partial: they were, however, without doubt, expressive of high respect on the part of the natives; and, as far as related to the person of Captain Cook, they seemed approaching to adoration.

The next morning, I went on shore with a guard of eight marines, including the corporal and lieutenant, having orders to erect the observatory in such a situation as might best enable me to superintend and protect the waterers, and the other working parties that were to be on shore. As we were viewing a spot conveniently situated for this purpose in the middle of the village, Pareea, who was always ready to shew both his power and his good-will, offered to pull down some houses, that would have obstructed our observations. However, we thought it proper to decline this offer, and fixed on a field of sweet potatoes adjoining to the Morai, which was readily granted us; and the priests, to prevent the intrusion of the natives, immediately consecrated the place, by fixing their wands round the wall by which it was inclosed.

No canoes ever presumed to land near us; the natives sat on the wall, but none offered to come within the tabooed space, till they had obtained our permission. But though the men, at our request, would come across the field with provisions, yet not all our endeavours could prevail on the women to approach us. Presents were tried, but without effect; Parcea and Koah were tempted to bring them, but in vain; we were invariably answered, that the Eatooa and Terreeoboo (which was the name of their king) would kill them. This circumstance afforded no small matter of amusement to our friends on board, where the crowds of people, and particularly of women, that continued to flock thither, obliged them almost every hour to clear the vessel, in order to have room to do the necessary duties of the ship. On these occasions, two or three hundred women were frequently made to jump into the water at once, where they continued swimming and playing about, till they again could procure admittance.

From the 19th to the 24th, when Parcea and Koah left us to attend Terreeoboo, who had landed on some other part of the island, nothing very material happened on board. The caulkers were set to work on the sides of the ships, and the rigging was carefully overhauled and repaired. The salting of hogs for sea-store was also a constant, and one of the principal objects of Captain Cook's attention.

We had not been long settled at the observatory, before we discovered, in our neighbourhood, the habitations of a society of priests, whose regular attendance at the Morai had excited our curiosity. Their huts stood round a pond of water, and were surrounded by a grove of cocoa-nut trees, which separated them from the beach and the rest of the village, and gave the place an air of religious retirement. On my acquainting Captain Cook with these circumstances, he resolved to pay them a visit; and, as he expected, was received in the same manner as before.

On his arrival at the beach, he was conducted to a sacred building called Harre-no-Orono, or the house of Orono, and seated before the entrance, at the foot of a wooden idol; of the same kind with those on the Morai. I was here again made to support one of his arms, and after wrapping him in red cloth, Kaireekkea, accompanied by twelve priests, made an offering of a pig with the usual solemnities. The pig was then strangled, and a fire being kindled, it was thrown into the embers, and after the hair was singed off, it was again presented with a repetition of the chanting, in the manner before described. The dead pig was then held for a short time under the captain's nose, after which it was laid with a cocoa-nut at his feet, and the performers sat down. The ava was then brewed, and handed round; a fat hog ready dressed was brought in, and we were fed as before.

During the rest of the time we remained in the bay, whenever Captain Cook came on shore he was attended by one of these priests, who went before him, giving notice that the Orono had landed, and ordered the people to prostrate themselves. The same person also constantly accompanied him on the water, standing in the bow of the boat, with a wand in his hand, and giving notice of his approach to the natives, who were in canoes, on which they immediately left off paddling, and lay down on their faces till he had passed. Whenever he stopped at the observatory, Kaireekkea and his brethren immediately made their appearance with hogs, cocoa-nuts, bread-fruit, &c. and presented them with the usual solemnities. It was on these occasions that some of the inferior chiefs frequently requested to be permitted to make an offering to the Orono. When this was granted, they presented the hog themselves, generally with evident marks of fear in their countenances, whilst Kaireekkea and the priests chanted their accustomed hymns.

The civilities of this society were not, however, confined to mere ceremony and parade. Our party on shore received from them, every day, a constant supply of hogs and vegetables, more than sufficient for our subsistence; and several canoes loaded with provisions were sent to the ships with the same punctuality. No return was ever demanded, or even hinted at in the most distant manner. Their presents were made with a regularity more like the discharge of a religious duty, than the effect of mere liberality; and when we enquired at whose charge all this munificence was displayed, we were told it was at the expence of a great man called Kaoo, the chief of the priests, and grandfather to Kaireekeea, who was at that time absent attending the King of the island.

As every thing relating to the character and behaviour of this people must be interesting to the reader, on account of the tragedy that was afterwards acted here, it will be proper to acquaint him, that we had not always so much reason to be satisfied with the conduct of the warrior chiefs, or carees, as with that of our priests. In all our dealings with the former, we found them sufficiently attentive to their own interests; and besides their habit of stealing, which may admit of some excuse, from the universality of the practice amongst the islanders of these seas, they make use of other artifices equally dishonourable. I shall only mention one instance, in which we discovered with regret our friend Koah to be a party principally concerned. As the chiefs, who brought us presents of hogs, were always sent back handsomely rewarded, we had generally a greater supply than we could make use of. On these occasions, Koah, who never failed in his attendance on us, used to beg such as we did not want, and they were always given to him. It one day happened that a pig was presented us, by a man whom Koah himself introduced as a chief, who was desirous of paying his respects, and we recollected the pig to be the same that had been given to Koah just before. This leading us to suspect some trick, we found, on further inquiry, the pretended chief to be an ordinary person; and on connecting this with other circumstances, we had reason to suspect that it was not the first time we had been the dupes of the like imposition.

Things continued in this state till the 24th, when we were a good deal surprized to find that no canoes were suffered to put off from the shore, and that the natives kept close to their houses. After several hours suspense, we learned that the bay was tabooed, and all intercourse with us interdicted, on account of the arrival of Terrecoboo. As we had not foreseen an accident of this sort, the crews of both ships were obliged to pass the day without their usual supply of vegetables. The next morning, therefore, they endeavoured, both by threats and promises, to induce the natives to come alongside; and as some of them were at last venturing to put off, a chief was observed attempting to drive them away. A musquet was immediately fired over his head, to make him desist, which had the desired effect; and refreshments were soon after purchased as usual. In the afternoon, Terrecoboo arrived, and visited the ships in a private manner, attended only by one canoe, in which were his wife and children. He stayed on board till near ten o'clock, when he returned to the village of Kowrowa.

The next day, about noon, the King, in a large canoe, attended by two others, set out from the village, and paddled toward the ship in great state. Their appearance was grand and magnificent. In the first canoe was Terrecoboo and his chiefs dressed in their rich feathered cloaks and helmets, and armed with long spears and daggers; in the second came the venerable Kaoo, the chief of the priests, and his brethren, with their idols displayed on red cloth. These idols were busts, of a gigantic size, made of wicker-work, and curiously covered with small feathers of various colours, wrought in



in the same manner with their cloaks. Their eyes were made of large pearl oysters, with a black nut fixed in the centre; their mouths were set with a double row of the fangs of dogs, and together with the rest of their features, were strangely distorted. The third canoe was filled with hogs and various sorts of vegetables. As they went along, the priests in the centre canoe sung their hymns with great solemnity; and after paddling round the ships, instead of going on board as was expected, they made toward the shore at the beach where we were stationed.

As soon as I saw them approaching, I ordered out our little guard to receive the King; and Captain Cook, perceiving that he was going on shore, followed him, and arrived nearly at the same time. We conducted them into the tent, where they had scarcely been seated, when the King rose up, and in a very graceful manner threw over the captain's shoulders the cloak he himself wore, put a feathered helmet upon his head, and a curious fan into his hand. He also spread at his feet five or six other cloaks, all exceedingly beautiful, and of the greatest value. His attendants then brought four very large hogs, with sugar-canes, cocoa-nuts, and bread-fruit; and this part of the ceremony was concluded by the King's exchanging names with Captain Cook, which, amongst all the islanders of the Pacific Ocean, is esteemed the strongest pledge of friendship. A procession of priests, with a venerable old personage at their head, now appeared, followed by a long train of men leading large hogs, and others carrying plantains, sweet potatoes, &c. By the looks and gestures of Kaireekkea, I immediately knew the old man to be the chief of the priests before mentioned, on whose bounty we had so long subsisted. He had a piece of red cloth in his hands, which he wrapped round Captain Cook's shoulders, and afterward presented him with a small pig in the usual form. A seat was then made for him, next to the King, after which, Kaireekkea and his followers began their ceremonies, Kaoo and the chiefs joined in the responses.

As soon as the formalities of the meeting were over, Captain Cook carried Terree-ohoo, and as many chiefs as the pinnace could hold, on board the Resolution. They were received with every mark of respect that could be shewn them; and Captain Cook, in return for the feathered cloak, put a linen shirt on the King, and girt his own hanger round him. The ancient Kaoo, and about half a dozen more old chiefs, remained on shore, and took up their abode at the priests' houses. During all this time not a canoe was seen in the bay, and the natives either kept within their huts, or lay prostrate on the ground. Before the King left the Resolution, Captain Cook obtained leave for the natives, to come and trade with the ships as usual; but the women, for what reason we could not learn, still continued under the effects of the taboo, that is, were forbidden to stir from home, or to have any communication with us.

The quiet and inoffensive behaviour of the natives having taken away every apprehension of danger, we did not hesitate to trust ourselves amongst them at all times, and in all situations. The officers of both ships went daily up the country in small parties, or even singly, and frequently remained out the whole night. It would be endless to recount all the instances of kindness and civility which we received upon those occasions. Wherever we went, the people flocked about us, eager to offer every assistance in their power, and highly gratified if their services were accepted. Various little arts were practised to attract our notice, or to delay our departure. The boys and girls ran before, as we walked through their villages, and stopped us at every opening, where there was room to form a groupe for dancing. At one time we were invited to accept a draught of cocoa-nut milk, or some other refreshment, under the  
shade

shade of their huts; at another, we were seated within a circle of young women who exerted all their skill and agility to amuse us with songs and dances.

The satisfaction we derived from their gentleness and hospitality, was, however, frequently interrupted by that propensity to stealing, which they have in common with all the other islanders of these seas. This circumstance was the more distressing, as it sometimes obliged us to have recourse to acts of severity, which we should willingly have avoided, if the necessity of the case had not absolutely called for them. Some of their most expert swimmers were one day discovered under the ships, drawing out the filling nails of the sheathing, which they performed very dexterously by means of a short stick, with a flint stone fixed in the end of it. To put a stop to this practice, which endangered the very existence of the vessels, we at first fired small shot at the offenders; but they easily got out of our reach by diving under the ship's bottom. It was therefore found necessary to make an example, by flogging one of them on board the *Discovery*.

The head of the *Resolution's* rudder being found exceedingly shaken, and most of the pintles either loose or broken, it was unhung, and sent on shore on the 27th, in the morning, to undergo a thorough repair. At the same time the carpenters were sent into the country, under conduct of some of Kaoo's people, to cut planks for the head rail-work, which was also entirely decayed and rotten.

On the 28th, Captain Clerke, whose ill health confined him for the most part on board, paid Terreeoboo his first visit at his hut on shore. He was received with the same formalities as were observed with Captain Cook; and, on his coming away, though the visit was quite unexpected, he received a present of thirty large hogs, and as much fruit and roots as his crew could consume in a week.

As we had not yet seen any thing of their sports or athletic exercises, the natives, at request of some of our officers, entertained us this evening with a boxing-match. Though these games were much inferior, as well in point of solemnity and magnificence, as in the skill and powers of the combatants, to what we had seen exhibited at the Friendly islands, yet, as they differed in some particulars, it may not be improper to give a short account of them. We found a vast concourse of people assembled on a level spot of ground, at a little distance from our tents. A long space was left vacant in the midst of them, at the upper end of which sat the judges, under three standards, from which hung slips of cloth of various colours, the skins of two wild geese, a few small birds, and bunches of feathers. When the sports were ready to begin, the signal was given by the judges, and immediately two combatants appeared. They came forward slowly, lifting up their feet very high behind, and drawing their hands along the soles. As they approached they frequently eyed each other from head to foot, in a contemptuous manner, casting several arch looks at the spectators, straining their muscles, and using a variety of affected gestures. Being advanced within reach of each other, they stood with both arms held out straight before their faces, at which part all their blows were aimed. They struck in, what appeared to our eyes, an awkward manner, with a full swing of the arm; made no attempt to parry, but eluded their adversary's attack by an inclination of the body, or by retreating. The battle was quickly decided; for if either of them was knocked down, or even fell by accident, he was considered as vanquished; and the victor expressed his triumph by a variety of gestures, which usually excited, as was intended, a loud laugh among the spectators. He then waited for a second antagonist; and if again victorious, for a third; till he was at last, in his turn, defeated. As these games were given at our desire, we found it was universally expected that we

should have borne our part in them; but our people, though much pressed by the natives, turned a deaf ear to their challenge, remembering full well the blows they got at the Friendly islands.

This day died William Watman, a seaman of the gunner's crew; an event which I mention the more particularly, as death had hitherto been very rare amongst us. He was an old man, and much respected on account of his attachment to Captain Cook. He had formerly served as a marine twenty-one years; after which he entered as a seaman on board the *Resolution* in 1772, and served with Captain Cook in his voyage toward the south pole. At their return, he was admitted into Greenwich Hospital, through the captain's interest, at the same time with himself; and being resolved to follow throughout the fortunes of his benefactor, he also quitted it along with him, on his being appointed to the command of the present expedition.

At the request of the King of the island, he was buried on the Morai, and the ceremony was performed with as much solemnity as our situation permitted. Old Kaoo and his brethren were spectators, and preserved the most profound silence and attention, whilst the service was reading. When we began to fill up the grave, they approached it with great reverence, threw in a dead pig, some cocoa-nuts, and plantains; and for three nights afterward they surrounded it, sacrificing hogs, and performing their usual ceremonies of hymns and prayers, which continued till day-break.

At the head of the grave was erected a post, and nailed upon it a square piece of board, on which was inscribed the name of the deceased, his age, and the day of his death. This they promised not to remove; and we have no doubt, but that it will be suffered to remain, as long as the frail materials of which it is made will permit.

The ships being in great want of fuel, the captain desired me, on the 2d of February, to treat with the priests, for the purchase of the rail that surrounded the top of the Morai. I must confess, I had at first some doubt about the decency of this proposal, and was apprehensive that even the bare mention of it might be considered by them, as a piece of shocking impiety. In this however I found myself mistaken. Not the smallest surprise was expressed at the application, and the wood was readily given, even without stipulating for any thing in return. Whilst the sailors were taking it away, I observed one of them carrying off a carved image; and, on further inquiry, I found that they had conveyed to the boats the whole \* semicircle. Though this was done in the presence of the natives, who had not shewn any mark of resentment at it, but had even assisted them in the removal, I thought it proper to speak to Kaoo on the subject; who appeared very indifferent about the matter, and only desired that we would restore the centre image I have mentioned before, which he carried into one of the priest's houses.

Terreeoboo, and his chiefs, had for some days past been very inquisitive about the time of our departure. This circumstance had excited in me a great curiosity to know what opinion this people had formed of us, and what were their ideas respecting the cause and objects of our voyage. I took some pains to satisfy myself on these points; but could never learn any thing further than that they imagined we came from some country where provisions had failed; and that our visit to them was merely for the purpose of filling our bellies. Indeed, the meagre appearance of some of our crew, the hearty appetites with which we sat down to their fresh provisions, and our great anxiety to purchase and carry off as much as we were able, led them naturally

\* See description of the *Morai*, in page 705.

enough to such a conclusion. To these may be added, a circumstance which puzzled them exceedingly, our having no women with us ; together with our quiet conduct, and unwarlike appearance. It was ridiculous enough to see them stroking the sides, and patting the bellies, of the sailors (who were certainly much improved in the sleekness of their looks, during our short stay in the island), and telling them, partly by signs, and partly by words, that it was time for them to go ; but if they would come again the next bread-fruit season, they should be better able to supply their wants. We had now been sixteen days in the bay ; and if our enormous consumption of hogs and vegetables be considered, it need not be wondered that they should wish to see us take our leave. On our telling Terreeoboo we should leave the island on the next day but one, we observed that a sort of proclamation was immediately made through the villages, to require the people to bring in their hogs and vegetables, for the King to present to the Orono on his departure.

The next day being fixed for our departure, Terreeoboo invited Captain Cook and myself to attend him, on the 3d, to the place where Kahoo resided. On our arrival we found the ground covered with parcels of cloth ; a vast quantity of red and yellow feathers, tied to the fibres of cocoa-nut husk ; and a great number of hatchets, and other pieces of iron-ware, that had been got in barter from us. At a little distance from these lay an immense quantity of vegetables of every kind, and near them was a very large herd of hogs. At first we imagined the whole to be intended as a present for us, till Kaireekaea informed me that it was a gift, or tribute, from the people of that district to the King ; and, accordingly, as soon as we were seated, they brought all the bundles, and laid them severally at Terreeoboo's feet, who gave all the hogs and vegetables, and two-thirds of the cloth, to Captain Cook and myself. We were astonished at the value and magnitude of this present, which far exceeded every thing of the kind we had seen, either at the Friendly or Society islands.

The same day we quitted the Morai, and got the tents and astronomical instruments on board. The charm of the taboo was now removed ; and we had no sooner left the place, than the natives rushed in, and searched eagerly about, in expectation of finding something of value that we might have left behind. Here, I hope, I may be permitted to relate a trifling occurrence, in which I was principally concerned. Having had the command of the party on shore, during the whole time we were in the bay, I had an opportunity of becoming well acquainted with the natives.

I spared no endeavours to conciliate their affections and gain their esteem ; and had the good fortune to succeed so far, that, when the time of our departure was made known, I was strongly solicited to remain behind, not without offers of the most flattering kind. When I excused myself, by saying that Captain Cook would not give his consent, they proposed that I should retire into the mountains, where they said they would conceal me, till after the departure of the ships ; and on my assuring them, that the captain would not leave the bay without me, Terreeoboo and Kaoo waited upon Captain Cook, whose son they supposed I was, with a formal request that I might be left behind. The captain, to avoid giving a positive refusal to an offer so kindly intended, told them that he could not part with me at that time, but that he should return to the island next year, and would then endeavour to settle the matter to their satisfaction.

Early in the morning of the 4th of February, we unmoored and sailed out of the bay, with the Discovery in company, and were followed by a great number of canoes. Captain Cook's design was to finish the survey of Owhyhee, before he visited the

other islands, in hopes of meeting with a road better sheltered than the bay we had just left.

We had calm weather this and the following day, which made our progress to the northward very slow. We were accompanied by a great number of the natives in their canoes. In the morning of the 6th, having passed the westernmost point of the island, we found ourselves abreast of a deep bay, called by the natives Toe-yah-yah. We had great hopes that this bay would furnish us with a safe and commodious harbour, as we saw to the north-east, several fine streams of water. These observations agreeing with the accounts given us by Koah, who accompanied Captain Cook, and had changed his name, out of compliment to us, into Britannee, the pinnace was hoisted out, and the master, with Britannee, for his guide, was sent to examine the bay, whilst the ships worked up after them.

In the afternoon the weather became gloomy, and the gusts of wind that blew off the land were so violent, as to make it necessary to take in all the sails, and bring to, under the mizen stay-sail.

The master reported to Captain Cook, that the place would by no means answer our purpose, and that Britannee had contrived to slip away, being afraid of returning, as we imagined, because his information had not proved true.

In the afternoon of the 7th, though the weather was still squally, we stood in for the land, and being about three leagues from it we saw a canoe, with two men paddling towards us, which we immediately conjectured had been driven off the shore by the late boisterous weather, and therefore stopped the ship's way in order to take them in. These poor wretches were so entirely exhausted with fatigue, that, had not one of the natives on board, observing their weakness, jumped into the canoe to their assistance, they would scarcely have been able to fasten it to the rope we had thrown out for that purpose. It was with difficulty we got them up the ship's side, together with a child, about four years old, which they had lashed under the thwarts of the canoe, where it had lain with only its head above water. They told us, they had left the shore the morning before, and had been from that time without food or water. The usual precautions were taken in giving them victuals, and the child being committed to the care of one of the women, we found them all next morning perfectly recovered.

At midnight on the 7th, a gale of wind came on, which obliged us to double-reef the top-sails, and get down to top-gallant yards. On the 8th at daybreak, we found that the foremast had given away. This accident induced Captain Cook to return to Karakakoa bay. On the 10th, the weather became moderate, and a few canoes came off to us, from which we learnt that the late storms had done much mischief, and that several large canoes had been lost. During the remainder of the day we kept beating to windward, and before night we were within a mile of the bay; but not chusing to run on while it was dark, we stood off and on till day-light next morning, when we dropt anchor nearly in the same place as before.

We were employed the whole of the 11th and part of the 12th, in getting out the foremast, and sending it with the carpenters on shore. Besides the damage which the head of the mast had sustained, we found the heel exceedingly rotten, having a large hole up the middle of it capable of holding four or five cocoa-nuts. As these repairs were likely to take up several days, Mr. Bayly and myself got the astronomical apparatus on shore the 12th, and pitched our tents on the Morai, having with us a guard of one corporal and six marines. We renewed our friendly correspondence with the priests, who, for the greater security of the workmen and their tools, tabooed

the place where the mast lay, flicking their wands round it as before. The sail-makers were also sent on shore, to repair the damages which had taken place in their department during the late gales. They were lodged in a house adjoining to the Morai that was lent us by the priests. Such were our arrangements on shore. I shall now proceed to the account of those other transactions with the natives, which led by degrees to the fatal catastrophe of the 14th.

Upon coming to anchor, we were surprized to find our reception very different from what it had been on our first arrival; no shouts, no bustle, no confusion; but a solitary bay, with only here and there a canoe stealing close along the shore. The impulse of curiosity, which had before operated to so great a degree, might now indeed be supposed to have ceased; but the hospitable treatment we had invariably met with, and the friendly footing on which we parted, gave us some reason to expect that they would again have flocked about us with great joy on our return.

We were forming various conjectures upon the occasion of this extraordinary appearance, when our anxiety was at length relieved by the return of a boat which had been sent on shore, and brought us word that Terreeoboo was absent, and had left the bay under the taboo. Though this account appeared very satisfactory to most of us, yet others were of opinion, or rather, perhaps, have been led by subsequent events to imagine, that there was something at this time very suspicious in the behaviour of the natives; and that the interdiction of all intercourse with us, on pretence of the King's absence, was only to give him time to consult the chiefs in what manner it might be proper to treat us. Whether these suspicions were well founded, or the account given us by the natives was the truth, we were never able to ascertain. For though it is not improbable that our sudden return, for which they could see no apparent cause, and the necessity of which we afterward found it very difficult to make them comprehend, might occasion some alarm; yet the unsuspicious conduct of Terreeoboo, who, on this supposed arrival, the next morning came immediately to visit Captain Cook, and the consequent return of the natives to their former friendly intercourse with us, are strong proofs that they neither meant, nor apprehended, any change of conduct.

In support of this opinion, I may add the account of another accident, precisely of the same kind, which happened to us on our first visit, the day before the arrival of the King. A native had sold a hog on board the Resolution, and taken the price agreed on, when Pareca, passing by, advised the man not to part with the hog, without the advanced price. For this he was sharply spoken to, and pushed away; and the taboo being soon after laid on the bay, we had at first no doubt but that it was in consequence of the offence given to the chief. Both these accidents serve to shew how very difficult it is to draw any certain conclusion from the actions of people with whose customs, as well as language, we are so imperfectly acquainted: at the same time, some idea may be formed from them of the difficulties, at the first view perhaps not very apparent, which those have to encounter, who, in all their transactions with these strangers, have to steer their course, amidst so much uncertainty, where a trifling error may be attended with even the most fatal consequences. However true or false our conjectures may be, things went on in their usual quiet course till the afternoon of the 13th.

Toward the evening of that day, the officer who commanded the watering party of the Discovery, came to inform me, that several chiefs had assembled at the well near the beach, driving away the natives, whom he had hired to assist the sailors in rolling down



down the casks to the shore. He told me at the same time, that he thought their behaviour extremely suspicious, and that they meant to give him some farther disturbance. At his request, therefore, I sent a marine along with him, but suffered him to take only his side-arms. In a short time the officer returned, and on his acquainting me that the islanders had armed themselves with stones, and were grown very tumultuous, I went myself to the spot, attended by a marine with his musquet. Seeing us approach, they threw away their stones, and on my speaking to some of the chiefs the mob were driven away, and those who chose it were suffered to assist in filling the casks. Having left things quiet here, I went to meet Captain Cook, whom I saw coming on shore in the pinnace. I related to him what had just passed; and he ordered me, in case of their beginning to throw stones, or behave insolently, immediately to fire a ball at the offenders. I accordingly gave orders to the corporal to have the pieces of the sentinels loaded with ball, instead of small shot.

Soon after our return to the tents, we were alarmed by a continued fire of musquets from the Discovery, which we observed to be directed at a canoe that we saw paddling toward the shore in great haste, pursued by one of our small boats. We immediately concluded that the firing was in consequence of some theft, and Captain Cook ordered me to follow him with a marine armed, and to endeavour to seize the people as they came on shore. Accordingly we ran toward the place where we supposed the canoe would land, but we were too late; the people having quitted it, and made their escape into the country before our arrival.

We were at this time ignorant that the goods had been already restored; and as we thought it probable, from the circumstances we had at first observed, that they might be of importance, were unwilling to relinquish our hopes of recovering them. Having therefore inquired of the natives which way the people had fled, we followed them till it was near dark, when judging ourselves to be about three miles from the tents, and suspecting that the natives, who frequently encouraged us in the pursuit, were amusing us with false information, we thought it in vain to continue our search any longer, and returned to the beach.

During our absence, a difference of a more serious and unpleasant nature had happened. The officer, who had been sent in the small boat, and was returning on board with the goods which had been restored, observing Captain Cook and me engaged in the pursuit of the offenders, thought it his duty to seize the canoe, which was left drawn up on the shore. Unfortunately this canoe belonged to Pareea, who arriving at the same moment from on board the Discovery, claimed his property with many protestations of his innocence. The officer refusing to give it up, and being joined by the crew of the pinnace, a scuffle ensued, in which Pareea was knocked down by a violent blow upon his head with an oar. The natives who were collected about the spot, and had hitherto been peaceable spectators, immediately attacked our people with such a shower of stones, as forced them to retreat with great precipitation, and swim off to a rock at some distance from the shore. The pinnace was immediately ransacked by the islanders; and but for the timely interposition of Pareea, who seemed to have recovered from the blow, and forgot it at the same instant, would soon have been entirely demolished. Having driven away the crowd, he made signs to our people that they might come and take possession of the pinnace, and that he would endeavour to get back the things which had been taken out of it. After their departure he followed them in his canoe, with a midshipman's cap, and some other trifling articles of the vessel, and with much apparent concern at what had happened, asked if the Orono would



would kill him, and whether he would permit him to come on board the next day? On being assured that he should be well received, he joined with the natives (as their custom is) with the officers, in token of friendship, and paddled over to the village of Kowrowa.

When Captain Cook was informed of what had passed, he expressed much uneasiness at it, and, as we were returning on board, "I am afraid," said he, "that these people will oblige me to use some violent measures; for (he added) they must not be left to imagine that they have gained an advantage over us." However, as it was too late to take any steps this evening, he contented himself with giving orders that every man and woman on board should be immediately turned out of the ship. As soon as this order was executed, I returned on shore; and our former confidence in the natives being now much abated by the events of the day, I posted a double guard on the Morai, with orders to call me, if they saw any men lurking about the beach. At about eleven o'clock five islanders were observed creeping round the bottom of the Morai; they seemed very cautious in approaching us, and at last finding themselves discovered, retired out of sight. About midnight one of them venturing up close to the observatory, the sentinel fired over him; on which the men fled, and we passed the remainder of the night without farther disturbance.

Next morning, the 14th, at day-light, I went on board the Resolution for the time-keeper, and in my way was hailed by the Discovery, and informed that their cutter had been stolen during the night from the buoy where it was moored.

When I arrived on board, I found the marines arming, and Captain Cook loading his double-barrell'd gun. Whilst I was relating to him what had happened to us in the night, he interrupted me with some eagerness, and acquainted me with the loss of the Discovery's cutter, and with the preparations he was making for its recovery. It had been his usual practice, whenever any thing of consequence was lost at any of the islands in this ocean, to get the King or some of the principal erees on board, and to keep them as hostages till it was restored. This method, which had been always attended with success, he meant to pursue on the present occasion; and, at the same time, had given orders to stop all the canoes, that should attempt to leave the bay, with an intention of seizing and destroying them, if he could not recover the cutter by peaceable means. Accordingly, the boats of both ships, well manned and armed, were stationed across the bay; and before I left the ship, some great guns had been fired at two large canoes that were attempting to make their escape.

It was between seven and eight o'clock when we quitted the ship together; Captain Cook in the pinnace, having Mr. Phillips and nine marines with him, and myself in the small boat. The last orders I received from him were to quiet the minds of the natives on our side of the bay, by assuring them they should not be hurt; to keep my people together, and to be on my guard. We then parted; the captain went toward Kowrowa, where the King resided; and I proceeded to the beach. My first care on going ashore was, to give strict orders to the marines to remain within the tent, to load their pieces with ball, and not to quit their arms. Afterward, I took a walk to the huts of old Kaoo and the priests, and explained to them as well as I could the object of the hostile preparations, which had exceedingly alarmed them. I found that they had already heard of the cutter's being stolen, and I assured them, that though Captain Cook was resolved to recover it, and to punish the authors of the theft, yet that they, and the people of the village on our side, need not be under the smallest apprehension of suffering any evil from us. I desired the priests to explain this to the people, and to tell them not to be alarmed, but to continue peaceable and quiet. Kaoo asked me with

with great earnestness, if Terreeoboo was to be hurt? I assured him he was not; and both he and the rest of his brethren seemed much satisfied with this assurance.

In the mean time Captain Cook, having called off the launch, which was stationed at the north point of the bay, and taking it along with him, proceeded to Kowrowa, and landed with the lieutenant and nine marines. He immediately marched to the village, where he was received with the usual marks of respect; the people prostrated themselves before him, and bringing their accustomed offerings of small hogs. Finding that there was no suspicion of his design, his next step was to inquire for Terreeoboo, and the two boys, his sons, who had been his constant guests on board the *Resolution*. In a short time the boys returned along with the natives, who had been sent in search of them, and immediately led Captain Cook to the house where the King had slept. They found the old man just awoke from sleep; and after a short conversation about the loss of the cutter, from which Captain Cook was convinced that he was in no wise privy to it, he invited him to return in the boat, and spend the day on board the *Resolution*. To this proposal the King readily consented, and immediately got up to accompany him.

Things were in this prosperous train; the two boys being already in the pinnace, and the rest of the party, having advanced near the water-side, when an elderly woman, called Kanee-kabareea, the mother of the boys, and one of the King's favourite wives, came after him, and with many tears and entreaties besought him not to go on board. At the same time two chiefs, who came along with her, laid hold on him, and insisting that he should go no farther, forced him to sit down. The natives, who were collecting in prodigious numbers along the shore, and had probably been alarmed by the firing of the great guns, and the appearances of hostility in the bay, began to throng round Captain Cook and their King. In this situation, the lieutenant of marines observing that his men were huddled close together in the crowd, and thus incapable of using their arms, if any occasion should require it, proposed to the captain to draw them up along the rocks close to the water's edge; and the crowd readily making way for them to pass, they were drawn up in a line at the distance of about thirty yards from the place where the King was sitting.

All this time the old King remained on the ground, with the strongest marks of terror and dejection in his countenance; Captain Cook, not willing to abandon the object for which he had come on shore, continuing to urge him in the most pressing manner to proceed; whilst on the other hand, whenever the King appeared inclined to follow him, the chiefs who stood round him interposed, at first with prayers and entreaties, but afterward having recourse to force and violence, insisted on his staying where he was. Captain Cook therefore finding that the alarm had spread too generally, and that it was in vain to think any longer of getting him off without bloodshed, at last gave up the point; observing to Mr. Phillips, that it would be impossible to compel him to go on board without the risk of killing a great number of the inhabitants.

Though the enterprise which had carried Captain Cook on shore had now failed and was abandoned, yet his person did not appear to have been in the least danger, till an accident happened which gave a fatal turn to the affair. The boats which had been stationed across the bay, having fired at some canoes that were attempting to get out, unfortunately had killed a chief of the first rank. The news of his death arrived at the village where Captain Cook was, just as he had left the King, and was walking slowly toward the shore. The ferment it occasioned was very conspicuous, the women and children were immediately sent off; and the men put on their war-mats, and  
armed

armed themselves with spears and stones. One of the natives, having in his hand a stone, and a long iron spike (which they called a pahooa), came up to the captain, flourishing his weapon by way of defiance, and threatening to throw the stone. The captain desired him to desist; but the man persisting in his insolence, he was at length provoked to fire a load of small shot. The man having his mat on, which the shot were not able to penetrate, this had no other effect than to irritate and encourage them. Several stones were thrown at the marines; and one of the crees attempted to stab Mr. Phillips with his pahooa, but failed in the attempt, and received from him a blow with the but-end of his musquet. Captain Cook now fired his second barrel, loaded with ball, and killed one of the foremost of the natives. A general attack with stones immediately followed, which was answered by a discharge of musquetry from the marines, and the people in the boats. The islanders, contrary to the expectation of every one, stood the fire with great firmness; and before the marines had time to reload, they broke in upon them with dreadful shouts and yells. What followed was a scene of the utmost horror and confusion.

Four of the marines were cut off amongst the rocks in their retreat, and fell a sacrifice to the fury of the enemy; three more were dangerously wounded; and the lieutenant, who had received a stab between the shoulders with a pahooa, having fortunately reserved his fire, shot the man who had wounded him, just as he was going to repeat his blow. Our unfortunate commander, the last time he was seen distinctly, was standing at the water's edge, and calling out to the boats to cease firing, and to pull in. If it be true, as some of those who were present imagined, that the marines and boat-men had fired without his orders, and that he was desirous of preventing any further bloodshed, it is not improbable that his humanity on this occasion proved fatal to him; for it was remarked, that whilst he faced the natives, none of them had offered him any violence; but that having turned about, to give his orders to the boats, he was stabbed in the back, and fell with his face into the water. On seeing him fall, the islanders set up a great shout, and his body was immediately dragged on shore, and surrounded by the enemy, who snatching the dagger out of each other's hands, shewed a savage eagerness to have a share in his destruction.

Thus fell our great and excellent commander! After a life of so much distinguished and successful enterprise, his death, as far as regards himself, cannot be reckoned premature; since he lived to finish the great work for which he seems to have been designed; and was rather removed from the enjoyment, than cut off from the acquisition of glory. How sincerely his loss was felt and lamented by those who had so long found their general security in his skill and conduct, and every consolation, under their hardships, in his tenderness and humanity, it is neither necessary nor possible for me to describe; much less shall I attempt to paint the horror with which we were struck, and the universal dejection and dismay which followed so dreadful and unexpected a calamity.

It has been already related, that four of the marines who attended Captain Cook were killed by the islanders on the spot. The rest, with Mr. Phillips, their lieutenant, threw themselves into the water and escaped, under cover of a smart fire from the boats. On this occasion, a remarkable instance of gallant behaviour, and of affection for his men, was shewn by that officer: for he had scarcely got into the boat, when seeing one of the marines, who was a bad swimmer, struggling in the water, and in danger of being taken by the enemy, he immediately jumped into the sea to his assistance, though much wounded himself; and after receiving a blow on the head from

a stone, which had nearly sent him to the bottom, he caught the man by the hair and brought him safe off.

Our people continued for some time to keep up a constant fire from the boats (which during the whole transaction were not more than twenty yards from the land,) in order to afford their unfortunate companions, if any of them should still remain alive, an opportunity of escaping. These efforts, seconded by a few guns that were fired at the same time from the Resolution, having forced the natives at last to retire, a small boat manned by five of our young midshipmen, pulled toward the shore, where they saw the bodies, without any signs of life, lying on the ground; but judging it dangerous to attempt to bring them off, with so small a force, and their ammunition being nearly expended, they returned to the ships, leaving them in possession of the islanders, together with ten stands of arms.

As soon as the general consternation, which the news of this calamity occasioned throughout both crews, had a little subsided, their attention was called to our party at the Morai, where the mast and sails were on shore, with a guard of only six marines. It is impossible for me to describe the emotions of my own mind, during the time these transactions had been carrying on, at the other side of the bay. Being at the distance only of a short mile from the village of Kowrowa, we could see distinctly an immense crowd collected on the spot where Captain Cook had just before landed. We heard the firing of the musquetry, and could perceive some extraordinary bustle and agitation in the multitude. We afterwards saw the natives flying, the boats retire from the shore, and passing and repassing, in great stillness, between the ships. I must confess that my heart soon misgave me. Where a life so dear and valuable was concerned, it was impossible not to be alarmed, by appearances both new and threatening. But, besides this, I knew that a long and uninterrupted course of success, in his transactions with the natives of these seas, had given the captain a degree of confidence that I was always fearful might, at some unlucky moment, put him too much off his guard; and I now saw all the dangers to which that confidence might lead, without receiving much consolation from considering the experience that had given rise to it.

My first care, on hearing the musquets fired, was to assure the people, who were assembled in considerable numbers round the wall of our consecrated field, and seemed equally at a loss with ourselves how to account for what they had seen and heard, that they should not be molested; and that, at all events, I was desirous of continuing on peaceable terms with them. We remained in this posture till the boats had returned on board; when Captain Clerke observing, through his telescope, that we were surrounded by the natives, and apprehending they meant to attack us, ordered two four-pounders to be fired at them. Fortunately these guns, though well aimed, did no mischief, and yet gave the natives a convincing proof of their power. One of the balls broke a cocoa-nut tree in the middle, under which a party of them were sitting; and the other shivered a rock that stood in an exact line with them. As I had just before given them the strongest assurances of their safety, I was exceedingly mortified at this act of hostility; and to prevent a repetition of it, immediately dispatched a boat to acquaint Captain Clerke that at present I was on the most friendly terms with the natives; and that, if occasion should hereafter arise for altering my conduct toward them, I would hoist a jack, as a signal for him to afford us all the assistance in his power.

We expected the return of the boat with the utmost impatience; and after remaining a quarter of an hour, under the most torturing anxiety and suspense, our fears were at length confirmed, by the arrival of Mr. Bligh, with orders to strike the tents as

quickly as possible, and to send the sails that were repairing on board. Just at the same moment our friend Kaireekaea, having also received intelligence of the death of Captain Cook, from a native who had arrived from the other side of the bay, came to me with great sorrow and dejection in his countenance, to enquire if it was true.

Our situation was at this time extremely critical and important. Not only our own lives, but the event of the expedition, and the return of at least one of the ships, being involved in the same common danger. We had the mast of the *Resolution*, and the greatest part of our sails on shore, under the protection of only six marines: their loss would have been irreparable; and though the natives had not as yet shewn the smallest disposition to molest us, yet it was impossible to answer for the alteration, which the news of the transaction at Kowrowa might produce. I therefore thought it prudent to dissimble my belief of the death of Captain Cook, and to desire Kaireekaea to discourage the report, lest either the fear of our resentment, or the successful example of their countrymen, might lead them to seize the favourable opportunity, which at this time offered itself, of giving us a second blow. At the same time, I advised him to bring old Kaoo, and the rest of the priest, into a large house that was close to the Morai; partly out of regard to their safety, in case it should have been necessary to proceed to extremities, and partly to have him near us, in order to make use of his authority with the people, if it could be instrumental in preserving peace.

Having placed the marines on the top of the Morai, which formed a strong and advantageous post, and left the command with Mr. Bligh, giving him the most positive directions to act entirely on the defensive, I went on board the *Discovery*, in order to represent to Captain Clerke the dangerous situation of our affairs. As soon as I quitted the spot, the natives began to annoy our people with stones; and I had scarcely reached the ship, before I heard the firing of the marines. I therefore returned instantly on shore, where I found things growing every moment more alarming. The natives were arming, and putting on their mats; and their numbers increased very fast. I could also perceive several large bodies marching toward us, along the cliff which separates the village of Kakooa from the north side of the bay where the village of Kowrowa is situated.

They began at first to attack us with stones, from behind the walls of their enclosures, and finding no resistance on our part, they soon grew more daring. A few resolute fellows having crept along the beach, under cover of the rocks, suddenly made their appearance at the foot of the Morai, with a design, as it seemed, of storming it on the side next the sea, which was its only accessible part; and were not dislodged till after they had stood a considerable number of shot, and seen one of their party fall.

The bravery of one of these assailants well deserves to be particularly mentioned. For, having returned to carry off his companion, amidst the fire of our whole party, a wound, which he received, made him quit the body and retire; but in a few minutes, he again appeared, and being again wounded, he was obliged a second time to retreat. At this moment I arrived at the Morai, and saw him return the third time, bleeding and faint; and being informed of what had happened, I forbade the soldiers to fire, and he was suffered to carry off his friend; which he was just able to perform, and then fell down himself, and expired.

About this time a strong reinforcement from both ships having landed, the natives retreated behind their walls; which giving me access to our friendly priests, I sent one of them to endeavour to bring their countrymen to some terms, and to propose to them, that if they would desist from throwing stones, I would not permit our men to

fire. This truce was agreed to ; and we were suffered to launch the mast, and carry off the sails and our astronomical apparatus unmolested. As soon as we had quitted the Morai, they took possession of it, and some of them threw a few stones, but without doing us any mischief.

It was half an hour past eleven o'clock when I got on board the *Discovery*, where I found no decisive plan had been adopted for our future proceedings. The restitution of the boat, and the recovery of the body of Captain Cook, were the objects which on all hands, we agreed to insist on ; and it was my opinion that some vigorous steps should be taken in case the demand of them was not immediately complied with. However, after mature deliberation, it was determined to accomplish these points by conciliatory measures, if possible.

During the time we were thus engaged in concerting some plan for our future conduct, a prodigious concourse of natives still kept possession of the shore ; and some of them came off in canoes, and had the boldness to approach within pistol-shot of the ships, and to insult us by various marks of contempt and defiance. It was with great difficulty we could restrain the sailors from the use of their arms on these occasions ; but as pacific measures had been resolved on, the canoes were suffered to return unmolested.

In pursuance of this plan, it was determined that I should proceed toward the shore, with the boats of both ships well manned and armed, with a view to bring the natives to a parley, and, if possible, to obtain a conference with some of the chiefs.

If this attempt succeeded, I was to demand the dead bodies, and particularly that of Captain Cook ; to threaten them with our vengeance in case of a refusal, but by no means to fire unless attacked, and not to land on any account whatever. These orders were delivered to me before the whole party, and in the most positive manner.

I left the ships about four o'clock in the afternoon, and as we approached the shore, I perceived every indication of a hostile reception. The whole crowd of natives was in motion ; the women and children retiring ; the men putting on their war-mats, and arming themselves with long spears and daggers. We also observed that since the morning, they had thrown up stone breast-works along the beach where Captain Cook had landed, probably in expectation of an attack at that place ; and, as soon as we were within reach, they began to throw stones at us with slings, but without doing any mischief. Concluding therefore that all attempts to bring them to a parley would be in vain, unless I first gave them some ground for mutual confidence, I ordered the armed boats to stop, and went on in the small boat alone, with a white flag in my hand, which, by a general cry of joy from the natives, I had the satisfaction to find was instantly understood. The women immediately returned from the side of the hill, whither they had retired ; the men threw off their mats ; and all sat down together by the water-side, extending their arms, and inviting me to come on shore.

Though this behaviour was very expressive of a friendly disposition, yet I could not help entertaining some suspicions of its sincerity. But when I saw Koah, with a boldness and assurance altogether unaccountable, swimming off toward the boat, with a white flag in his hand, I thought it necessary to return this mark of confidence, and therefore received him into the boat, though armed ; a circumstance which did not tend to lessen my suspicions. I must confess I had long harboured an unfavourable opinion of this man. The priests had always told us that he was of a malicious disposition, and no friend of ours ; and the repeated detections of his fraud and treachery had convinced us of the truth of their representations. Add to all this, the shocking transaction of the morning, in which he was seen acting a principal part, made me feel the



the utmost horror at finding myself so near him ; and as he came up to me with feigned tears and embraced me, I was so distrustful of his intentions, that I could not help taking hold of the point of the pahooah, which he held in his hand, and turning it from me. I told him that I had come to demand the body of Captain Cook, and to declare war against them, unless it was instantly restored. He assured me this should be done as soon as possible, and that he would go himself for that purpose ; and after begging of me a piece of iron, with as much assurance as if nothing extraordinary had happened, he leaped into the sea and swam ashore, calling out to his countrymen that we were all friends again.

We waited near an hour with great anxiety for his return ; during which time the rest of the boats had approached so near the shore, as to enter into conversation with a party of the natives at some distance from us ; by whom they were plainly given to understand that the body had been cut to pieces and carried up the country ; but of this circumstance I was not informed till our return to the ships.

I began now to express some impatience at Koah's delay, upon which the chiefs pressed me exceedingly to come on shore ; assuring me, that if I would go myself to Terreeoboo, the body would certainly be restored to me. When they found they could not prevail on me to land, they attempted under pretence of wishing to converse with more ease, to decoy our boat among some rocks, where they would have had it in their power to cut us off from the rest. It was no difficult matter to see through these artifices ; and I was therefore strongly inclined to break off all further communication with them, when a chief came to us, who was the particular friend of Captain Clerke, and of the officers of the Discovery. He told us, he came from Terreeoboo, to acquaint us that the body was carried up the country, but that it should be brought to us the next morning. There appeared a great deal of sincerity in his manner ; and being asked if he told a falsehood, he hooked his two fore-fingers together, which is understood amongst these islanders as the sign of truth ; in the use of which they are very scrupulous.

As I was now at a loss in what manner to proceed, I sent Mr. Vancouver to acquaint Captain Clerke with all that had passed ; that my opinion was, they meant not to keep their word with us, and were so far from being sorry, at what had happened, that, on the contrary, they were full of spirits and confidence on account of their late success, and fought only to gain time, till they could contrive some scheme for getting us into their power. Mr. Vancouver came back with orders for me to return on board, having first given the natives to understand that if the body was not brought the next morning, the town would be destroyed.

When they saw that we were going off, they endeavoured to provoke us by the most insulting and contemptuous gestures. Some of our people said they could distinguish several of the natives parading about in the clothes of our unfortunate comrade ; and among them, a chief brandishing Captain Cook's hanger, and a woman holding the scabbard. Indeed there can be no doubt but that our behaviour had given them a mean opinion of our courage ; for they could have but little notion of the motives of humanity that directed it.

In consequence of the report I made to Captain Clerke, of what I conceived to be the present temper and disposition of these islanders, the most effectual measures were taken to guard against any attack they might make in the night. The boats were moored with top-chains ; additional sentinels were posted on both ships ; and guard-boats were stationed to row round them, in order to prevent the natives from cutting the cables. During the night we observed a prodigious number of lights on the hills,



hills, which made some of us imagine they were removing their effects back into the country, in consequence of our threats. But I rather believe them to have been the sacrifices that were performing on account of the war, in which they imagined themselves about to be engaged; and most probably the bodies of our slain countrymen were at that time burning.

We passed the night quietly, and early the next morning, Koah came alongside the *Resolution* with a present of cloth and a small pig, which he desired leave to present to me. I have mentioned before that I was supposed, by the natives, to be the son of Captain Cook; and as he in his life time had always suffered them to believe it, I was probably considered as the chief after his death. As soon as I came on deck, I questioned him about the body; and on his returning me nothing but evasive answers, I refused to accept his presents, and was going to dismiss him with some expressions of anger and resentment, had not Captain Clerke, judging it best at all events to keep up the appearance of friendship, thought it more proper that he should be treated with the usual respect.

This treacherous fellow came frequently to us during the course of the forenoon with some trifling present or other, and as I always observed him eyeing every part of the ship with great attention, I took care he should see we were well prepared for our defence.

He was exceedingly urgent both with Captain Clerke and myself to go on shore, laying all the blame of the detention of the bodies on the other chiefs, and assuring us that every thing might be settled to our satisfaction by a personal interview with Terreeoboo. However, his conduct was too suspicious to make it prudent to comply with this request; and indeed a fact came afterwards to our knowledge, which proved the entire falsehood of his pretensions. For we were told that immediately after the action in which Captain Cook was killed, the old King had retired to a cave in the steep part of the mountain that hangs over the bay, which was accessible only by the help of ropes, and where he remained for many days, having his victuals let down to him by cords.

When Koah returned from the ships, we could perceive that his countrymen, who had been collected by break of day in vast crowds on the shore, thronged about him with great eagerness, as if to learn the intelligence he had acquired, and what was to be done in consequence of it. It is very probable that they expected we should attempt to put our threats in execution, and they seemed fully resolved to stand their ground. During the whole morning, we heard conchs blowing in different parts of the coast; large parties were seen marching over the hills; and in short, the appearances were so alarming, that we carried out a stream anchor to enable us to haul the ship abreast of the town in case of an attack, and stationed boats off the north point of the bay to prevent a surprise from that quarter.

The breach of their engagement to restore the bodies of the slain, and the warlike posture in which they at this time appeared, occasioned fresh debates amongst us concerning the measures next to be pursued. It was at last determined, that nothing should be suffered to interfere with the repair of the mast, and the preparations for our departure; but that we should nevertheless continue our negotiations for the recovery of the bodies.

The greatest part of the day was taken up in getting the foremast into a proper situation on deck for the carpenters to work upon it, and in making the necessary alterations in the commissions of the officers. The command of the expedition having devolved on Captain Clerke, he removed on board the *Resolution*, appointed Lieutenant

tenant Gore to be captain of the *Discovery*, and promoted Mr. Harvey, a midshipman, who had been with Captain Cook in his two last voyages, to the vacant lieutenantcy. During the whole day we met with no interruption from the natives, and at night the launch was again moored with a top-chain, and guard-boats stationed round both ships as before.

About eight o'clock, it being very dark, a canoe was heard paddling toward the ship; and as soon as it was seen, both the sentinels on deck fired into it. There were two persons in the canoe, and they immediately roared out "Tinnee," (which was the way in which they pronounced my name), and said they were friends, and had something for me belonging to Captain Cook. When they came on board, they threw themselves at our feet, and appeared exceedingly frightened. Luckily neither of them was hurt, notwithstanding the balls of both pieces had gone through the canoe. One of them was the person whom I have before mentioned under the name of the Taboo man, who constantly attended Captain Cook with the circumstances of ceremony I have already described; and who, though a man of rank in the island, could scarcely be hindered from performing for him the lowest offices of a menial servant. After lamenting with abundance of tears, the loss of the *Orono*, he told us that he had brought us a part of his body. He then presented to us a small bundle wrapped up in cloth, which he brought under his arm; and is it possible to describe the horror which seized us on finding in it a piece of human flesh, about nine or ten pounds weight? This, he said, was all that remained of the body; that the rest was cut to pieces and burnt; but that the head and all the bones, except what belonged to the trunk, were in the possession of Terreeoboo and the other Erees; that what we saw had been allotted to Kaoo, the chief of the priests, to be made use of in some religious ceremony, and that he had sent it as a proof of his innocence and attachment to us.

This afforded an opportunity of informing ourselves whether they were cannibals, and we did not neglect it. We first tried by many indirect questions, put to each of them apart, to learn in what manner the rest of the bodies had been disposed of; and finding them very constant in one story, that after the flesh had been cut off it was all burnt, we at last put the direct question—Whether they had not eat some of it? They immediately shewed as much horror at the idea as any European would have done; and asked very naturally if that was the custom amongst us? They afterwards asked us, with great earnestness and apparent apprehension, "When the *Orono* would come again, and what he would do to them on his return?" The same enquiry was frequently made afterwards by others; and this idea agrees with the general tenour of their conduct towards him, which shewed that they considered him as a being of a superior nature.

We pressed our two friendly visitors to remain on board till morning, but in vain. They told us, that if this transaction should come to the knowledge of the King or chiefs, it might be attended with the most fatal consequences to their whole society; in order to prevent which, they had been obliged to come off to us in the dark, and the same precaution would be necessary in returning on shore. They informed us farther, that the chiefs were eager to revenge the death of their countrymen; and particularly cautioned us against trusting Koah, who, they said, was our mortal and implacable enemy, and desired nothing more ardently than an opportunity of fighting us; to which the blowing of the conchs we had heard in the morning was meant as a challenge.

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We learned from these men that seventeen of their countrymen were killed in the first action at Kowrowa, of whom five were chiefs; and that Kanea and his brother, our very particular friends, were unfortunately of that number. Eight, they said, were killed at the observatory; three of whom were also of the first rank.

About eleven o'clock our two friends left us, and took the precaution to desire that our guard-boat might attend them till they had passed the Discovery, lest they should again be fired upon, which might alarm their countrymen on shore, and expose them to the danger of being discovered. This request was complied with; and we had the satisfaction to find that they got safe and undiscovered to land.

During the remainder of this night we heard the same loud howling and lamentations. Early in the morning we received another visit from Koah. I must confess, I was a little piqued to find, that notwithstanding the most evident marks of treachery in his conduct, and the positive testimony of our friends the priests, he should still be permitted to carry on the same farce, and to make us appear to be the dupes of his hypocrisy. Indeed our situation was become extremely awkward and unpromising; none of the purposes for which this pacific course of proceeding had been adopted having hitherto been in the least forwarded by it. No satisfactory answer whatever had been given to our demands; we did not seem to be at all advanced toward a reconciliation with the islanders; they still kept in force on the shore, as if determined to resist any attempts we might make to land; and yet the attempt was become absolutely necessary, as the completing our supply of water would not admit of any longer delay.

However it must be observed, in justice to the conduct of Captain Clerke, that it was very probable, from the great numbers of the natives, and from the resolution with which they seemed to expect us, an attack could not have been made without some danger; and that the loss of a very few men might have been severely felt by us, during the remaining course of our voyage. Whereas the delaying the execution of our threats, though, on the one hand, it lessened their opinion of our prowess, had the effect of causing them to disperse on the other. For this day about noon finding us persist in our inactivity, great bodies of them, after blowing their conchs and using every mode of defiance, marched off over the hills, and never appeared afterward. Those however who remained were the not less daring and insolent. One man had the audacity to come within musquet-shot a-head of the ship; and, after flinging several stones at us, he waved Captain Cook's hat over his head, whilst his countrymen on shore were exulting, and encouraging his boldness. Our people were all in a flame at this insult, and, coming in a body on the quarter-deck, begged they might no longer be obliged to put up with these repeated provocations; and requested me to obtain permission for them, from Captain Clerke, to avail themselves of the first fair occasion of revenging the death of their commander. On my acquainting him with what was passing, he gave orders for some great guns to be fired at the natives on shore; and promised the crew that, if they should meet with any molestation at the watering-place, the next day, they should then be left at liberty to chastise them.

It is somewhat remarkable, that before we could bring our guns to bear, the islanders had suspected our intentions, from the stir they saw in the ship; and had retired behind their houses and walls. We were therefore obliged to fire in some measure at random; notwithstanding which, our shot produced all the effect that could have been desired. For soon after we saw Koah paddling towards us, with  
extreme

extreme haste, and on his arrival we learned that some people had been killed, and amongst the rest, Maiha-Maiha, a principal chief, and a near relation to the king\*.

Soon after the arrival of Koah, two boys swam off from the Morai toward the ships, having each a long spear in his hand; and, after they had approached pretty near, they began to chant a song in a very solemn manner; the subject of which, from their often mentioning the word Crono, and pointing to the village where Captain Cook was killed, we concluded to be the late calamitous disaster. Having sung in a plaintive strain for about twelve or fifteen minutes, during the whole of which time they remained in the water, they went on-board the Discovery, and delivered their spears; and after making a short stay, returned on shore. Who sent them, or what was the object of this ceremony, we were never able to learn.

At night, the usual precautions were taken for the security of the ships; and as soon as it was dark, our two friends, who had visited us the night before, came off again. They assured us that though the effect of our great guns this afternoon had terrified the chiefs exceedingly, they had by no means laid aside their hostile intentions, and advised us to be on our guard.

The next morning, the boats of both ships were sent ashore for water; and the Discovery was warped close to the beach, in order to cover that service. We soon found that the intelligence which the priests had sent us, was not without foundation; and that the natives were resolved to take every opportunity of annoying us, when it could be done without much risk.

Throughout all this group of islands, the villages, for the most part, are situated near the sea; and the adjacent ground is enclosed with stone walls, about three feet high. These, we at first imagined, were intended for the division of property; but we now discovered that they served, and probably were principally designed, for a defence against invasion. They consist of loose stones, and the inhabitants are very dexterous in shifting them, with great quickness, to such situations as the direction of the attack may require. In the sides of the mountain, which hangs over the bay, they have also little holes or caves, of considerable depth, the entrance of which is secured by a fence of the same kind. From behind both these defences the natives kept perpetually harassing our waterers with stones; nor could the small force we had on shore, with the advantage of musquets, compel them to retreat.

In this exposed situation, our people were so taken up in attending to their own safety, that they employed the whole forenoon in filling only one tun of water. As it was therefore impossible to perform this service, till their assailants were driven to a greater distance, the Discovery was ordered to dislodge them with her great guns; which being effected by a few discharges, the men landed without molestation. However, the natives soon after made their appearance again, in their usual mode of attack; and it was now found absolutely necessary to burn down some straggling houses near the wall, behind which they had taken shelter. In executing these orders, I am sorry to add that our people were hurried into acts of unnecessary cruelty and devastation. Something ought certainly to be allowed to their resentment of the repeated insults and contemptuous behaviour of the islanders, and to the natural desire of revenging the loss of their commander. But at the same time their conduct served strongly to convince me, that the utmost precaution is necessary in trusting, though but for a

\* The word Matee is commonly used, in the language of these islands, to express either killing or wounding; and we were afterward told, that this chief had only received a slight blow on the face from a stone which had been struck by one of the balls.

moment, the discretionary use of arms, in the hands of private seamen or soldiers, on such occasions.

Their orders were only to burn a few straggling huts, which afforded shelter to the natives. We were therefore a good deal surprized to see the whole village on fire; and before a boat, that was sent to stop the progress of the mischief, could reach the shore, the houses of our old and constant friends, the priests, were all in flames. "I cannot enough lament the illness that confined me on board this day. The priests had always been under my protection; and unluckily, the officers who were then on duty, having been seldom on shore at the Morai, were not much acquainted with the circumstances of the place. Had I been present myself, I might probably have been the means of saving their little society from destruction.

Several of the natives were shot, in making their escape from the flames; and our people cut off the heads of two of them, and brought them on board. The fate of one poor islander was much lamented by us all. As he was coming to the well for water, he was shot at by one of the marines. The ball struck his calibash, which he immediately threw from him, and fled. He was pursued into one of the caves I have before described, and no lion could have defended his den with greater courage and fierceness; till at last, after having kept two of our people at bay for a considerable time, he expired covered with wounds. It was this accident that first brought us acquainted with the use of these caverns.

At this time an elderly man was taken prisoner, bound, and sent on board in the same boat with the heads of his two countrymen. I never saw horror so strongly pictured as in the face of this man, nor so violent a transition to extravagant joy, as when he was untied, and told he might go away in safety. He shewed us he did not want gratitude, as he frequently afterward returned with presents of provisions; and also did us other services.

Soon after the village was destroyed, we saw coming down the hill, a man, attended by fifteen or twenty boys, holding pieces of white cloth, green boughs, plantains, &c. in their hands. I knew not how it happened that this peaceful embassy, as soon as they were within reach, received the fire of a party of our men. This however did not stop them. They continued their procession, and the officer on duty came up in time to prevent a second discharge. As they approached nearer, it was found to be our much-esteemed friend Kaireckeea, who had fled on our first setting fire to the village, and had now returned, and desired to be sent on board the Resolution.

When he arrived, we found him exceedingly grave and thoughtful. We endeavoured to make him understand the necessity we were under of setting fire to the village, by which his house, and those of his brethren, were unintentionally consumed. He expostulated a little with us on our want of friendship, and on our ingratitude. And, indeed, it was not till now that we learnt the whole extent of the injury we had done them. He told us that, relying on the promises I had made them, and on the assurance they had afterward received from the men, who had brought us the remains of Captain Cook, they had not removed their effects back into the country, with the rest of the inhabitants, but had put every thing that was valuable of their own, as well as what they had collected from us, into a house close to the Morai, where they had the mortification to see it all set on fire by ourselves.

On coming on board, he had seen the heads of his countrymen lying on the deck, at which he was exceedingly shocked, and desired with great earnestness that they might be thrown overboard. This request Captain Clerke instantly ordered to be complied

In the evening, the watering party returned on board, having met with no farther interruption. We passed a gloomy night; the cries and lamentations we heard on shore being far more dreadful than ever. Our only consolation was, the hope that we should have no occasion in future for a repetition of such severities.

It is very extraordinary, that amidst all these disturbances the women of the island who were on board, never offered to leave us, nor discovered the smallest apprehensions either for themselves or their friends ashore. So entirely unconcerned did they appear, that some of them, who were on deck when the town was in flames, seemed to admire the sight, and frequently cried out that it was maitai, or very fine.

The next morning, Koah came off as usual to the ships. As there existed no longer any necessity for keeping terms with him, I was allowed to have my own way. When he approached toward the side of the ship, singing his song, and offering me a hog, and some plantains, I ordered him to keep off, cautioning him never to appear again without Captain Cook's bones, lest his life should pay the forfeit of his frequent breach of promise. He did not appear much mortified with this reception, but went immediately on shore, and joined a party of his countrymen, who were pelting the waterers with stones. The body of the young man who had been killed the day before, was found this morning, lying at the entrance of the cave; and some of our people went and threw a mat over it. Soon after which they saw some men carrying him off on their shoulders, and could hear them singing, as they marched, a mournful song.

The natives being at last convinced that it was not the want of ability to punish them, which had hitherto made us tolerate their provocations, desisted from giving us any farther molestation; and in the evening, a chief called Eappo, who had seldom visited us, but whom we knew to be a man of the very first consequence, came with presents from Terreeoboo to sue for peace. These presents were received, and he was dismissed with the same answer which had before been given, that until the remains of Captain Cook should be restored, no peace would be granted. We learned from this person that the flesh of all the bodies of our people, together with the bones of the trunks, had been burnt; that the limb-bones of the marines had been divided amongst the inferior chiefs; and that those of Captain Cook had been disposed of in the following manner: the head to a great chief called Kahoo-opeon; the hair to Maiha-Maiha; and the legs, thighs, and arms to Terreeoboo. After it was dark, many of the inhabitants came off with roots and other vegetables; and we also received two large presents of the same articles from Kaireekceca.

The 19th was chiefly taken up in sending and receiving the messages which passed between Captain Clerke and Terreeoboo. Eappo was very pressing that one of our officers should go on shore; and in the mean time offered to remain as an hostage on board. This request, however, it was not thought proper to comply with; and he left us with a promise of bringing the bones next day. At the beach the waterers did not meet with the least opposition from the natives; who, notwithstanding our cautious behaviour, came amongst us again, without the smallest appearance of diffidence or apprehension.

Early in the morning of the 20th, we had the satisfaction of getting the foremast stepped. It was an operation attended with great difficulty, and some danger; our ropes being so exceeding rotten that the purchase gave way several times.

Between ten and eleven o'clock, we saw a great number of people descending the hill, which is over the beach, in a kind of procession, each man carrying a sugar-cane or two on his shoulders, and bread-fruit, taro, and plantains in his hand. They were preceded



preceded by two drummers; who, when they came to the water-side, sat down by a white flag, and began to beat their drums, while those who had followed them advanced one by one; and having deposited the presents they had brought, retired in the same order. Soon after, Eappo came in sight, in his long feathered cloak, bearing something with great solemnity in his hands; and having placed himself on a rock, made signs for a boat to be sent him.

Captain Clerke, conjecturing that he had brought the bones of Captain Cook, which proved to be the fact, went himself in the pinnace to receive them; and ordered me to attend him in the cutter. When we arrived at the beach, Eappo came into the pinnace, and delivered to the captain the bones wrapped up in a large quantity of fine new cloth, and covered with a spotted cloak of black and white feathers. He afterwards attended us to the Resolution, but could not be prevailed upon to go on board; probably not chusing, from a sense of decency, to be present at the opening of the bundle. We found in it both the hands of Captain Cook entire, which were well known from a remarkable scar on one of them, that divided the thumb from the forefinger, the whole length of the metacarpal bone; the skull, but with the scalp separated from it, and the bones that form the face wanting; the scalp with the hair upon it cut short, and the ears adhering to it; the bones of both arms, with the skin of the fore-arms hanging to them; the thigh and leg-bones joined together, but without the feet. The ligaments of the joints were entire; and the whole bore evident marks of having been in the fire, except the hands, which had the flesh left upon them, and were cut in several places, and crammed with salt, apparently with an intention of preserving them. The scalp had a cut in the back part of it, but the skull was free from any fracture. The lower jaw and feet, which were wanting, Eappo told us, had been seized by different chiefs, and that Terreeoboo was using every means to recover them.

The next morning, Eappo, and the King's son, came on board, and brought with them the remaining bones of Captain Cook; the barrels of his gun, his shoes, and some other trifles that belonged to him. Eappo took great pains to convince us, that Terreeoboo, Maiha-Maiha, and himself, were most heartily desirous of peace; that they had given the most convincing proof of it in their power; and that they had been prevented from giving it sooner by the other chiefs, many of whom were still our enemies. He lamented, with the greatest sorrow, the death of six chiefs we had killed, some of whom, he said, were amongst our best friends. The cutter, he told us, was taken away by Pareea's people; very probably in revenge for the blow that had been given him; and that it had been broken up the next day. The arms of the marines, which we had also demanded, he assured us had been carried off by the common people, and were irrecoverable; the bones of the chief alone having been preserved, as belonging to Terreeoboo and the Erees.

Nothing now remained but to perform the last offices to our great and unfortunate commander. Eappo was dismissed with orders to taboo all the bay; and, in the afternoon, the bones having been put into a coffin, and the service read over them, they were committed to the deep with the usual military honours. What our feelings were on this occasion, I leave the world to conceive; those who were present know that it is not in my power to express them.

During the forenoon of the 22d, not a canoe was seen paddling in the bay; the taboo, which Eappo had laid on it the day before at our request, not being yet taken off. At length Eappo came off to us. We assured him that we were now entirely satisfied, and that as the Orono was buried, all remembrance of what had passed was buried



buried with him. We afterwards desired him to take off the *taboo*, and to make it known that the people might bring their provisions as usual. The ships were soon surrounded with canoes, and many of the chiefs came on board, expressing great sorrow at what had happened, and their satisfaction at our reconciliation. Several of our friends, who did not visit us, sent presents of large hogs, and other provisions. Amongst the rest came the old treacherous Koah, but was refused admittance.

As we had now every thing ready for sea, about eight o'clock this evening we dismissed all the natives; Eappo, and the friendly Kaireekaea, took an affectionate leave of us. We immediately weighed, and stood out of the bay. The natives were collected on the shore in great numbers; and, as we passed along, received our last farewells with every mark of affection and good-will.

We got clear of the land about ten on the 22d, and hoisting in the boats, stood to the northward.

In the afternoon of the 24th, the weather being calm, with light airs from the west, we stood on to the north-north-west; but at sunset, observing a shoal stretching from the west point of Mowee toward the middle of the passage, we tacked, and stood toward the south.

The south-west side of this island, which we now had passed without being able to get near the shore, forms the same distant view with the north-east, as seen on our return from the north in November 1778, the mountainous parts, which are connected by a low, flat isthmus, appearing at first like two separate islands.

On the 27th, we got to the windward of Woahoo, an island we had seen at our first visit. Between the north point and a distant headland, which we saw to the south-west, the land bends inward considerably, and appeared likely to afford a good road. At a quarter past two the sight of a fine river, running through a deep valley, induced us to come to an anchor in thirteen fathoms water, with a sandy bottom. In the afternoon, I attended the two captains on shore, where we found but few natives, and those mostly women; the men, they told us, were gone to Morotoi to fight Tahyterree; but that their chief Perreorance, who had stayed behind, would certainly visit us, as soon as he heard of our arrival.

We were much disappointed to find the water had a brackish taste, for two hundred yards up the river, owing to the marshy ground through which it empties itself into the sea.

As the watering at this place would have been attended with great labour, Captain Clerke determined, without farther loss of time, to proceed to Atooi. On the 28th, we bore away for that island, which we were in sight of by noon; and about sun-set, were off its eastern extremity.

We passed the night in plying on and off, and at nine the next morning, came to an anchor in twenty-five fathoms water.

We had no sooner anchored in our old station, than several canoes came alongside of us; but we could observe, that they did not welcome us with the same cordiality in their manner, and satisfaction in their countenances, as when we were here before. As soon as they got on board, one of the men began to tell us that we had left a disorder amongst their women, of which several persons of both sexes had died.

Our principal object here was to water the ships with the utmost expedition; and I was sent on shore early in the afternoon. The gunner of the *Resolution* accompanied me to trade for provisions; and we had a guard of five marines. We found a considerable number of people collected upon the beach, who received us at first with great kindness;

kindness; but as soon as we had got the casks on shore, began to be exceedingly troublesome. It was with great difficulty I was able to form a circle, according to our usual practice, for the convenience of our trading party; and had no sooner done it, than I saw a man laying hold of the bayonet of one of the soldiers, musquets, and endeavouring with all his force to wrench it out of his hand. On my coming up to them, the native let go his hold and retired; but returned in a moment, with a spear in one hand and a dagger in the other; and his countrymen had much ado to restrain him from trying his prowess with the soldier. This fray was occasioned by the latter's having given the man a slight prick with his bayonet, in order to make him keep without the line.

I now perceived that our situation required great circumspection and management; and accordingly gave the strictest orders that no one should fire, nor have recourse to any other act of violence, without positive commands. As soon as I had given these directions, I was called to the assistance of the watering party, where I found the natives equally inclined to mischief. They had demanded from our people a large hatchet for every cask of water; and this not being complied with, they would not suffer the sailors to roll them down to the boats.

I had no sooner joined them, than one of the natives advanced up to me with great insolence, and made the same claim. I told him that as a friend, I was very willing to present him with a hatchet, but that I should certainly carry off the water, without paying any thing for it; and I immediately ordered the pinnace-men to proceed in their business, and called three marines from the traders to protect them.

Though this shew of spirit succeeded so far as to make the natives desist from any open attempt to interrupt us, they still continued to behave in the most teasing and provoking manner. Whilst some of them, under pretence of assisting the men in rolling down the casks, turned them out of their course, and gave them a wrong direction, others were stealing the hats from off the sailors' heads, pulling them backward by their clothes, or tripping up their heels; the whole crowd, all this time, shouting and laughing, with a strange mixture of childishness and malice. They afterwards found means to steal the cooper's bucket, and took away his bag by force; but the objects they were most eager to possess themselves of, were the musquets of the marines, who were every instant complaining of their attempts to force them out of their hands. Though they continued for the most part, to pay great deference and respect to me, yet they did not suffer me to escape without contributing my share to their stock of plunder. One of them came up to me with a familiar air, and with great management diverted my attention, whilst another, wrenching the hanger, which I held carelessly in my hand, from me, ran off with it like lightning.

It was in vain to think of repelling this insolence by force; guarding therefore against its effects, in the best manner we were able, we had nothing to do but to submit patiently to it. My apprehensions were however a little alarmed, by the information I soon after received from the serjeant of marines, who told me that, turning suddenly round, he saw a man behind me, holding a dagger in the position of striking. As our people were separated into three small parties, one at the lake, filling casks, another rolling them down to the shore, and the third at some distance, purchasing provisions; it had once occurred to me that it might be proper to collect them all together, and to execute and protect one duty at a time. But on second thoughts, I judged it more advisable to let them continue where they were. In case of a real attack, our whole force, however advantageously disposed, could have made but a poor resistance. On the

the other hand, I thought it of some consequence to shew the natives we were under no fears; and what was still more material, the crowd was by this means kept divided, and a considerable part of them fully employed in bartering provisions.

While we were getting the casks into the launch, the natives perceiving the opportunity of plundering would soon be over, became every moment more daring and insolent. On this occasion, I was indebted to the serjeant of marines for suggesting to me the advantage that would arise from sending off his party first into the boats; by which means, the musquets of the soldiers, which, as I have already mentioned, were the objects the islanders had principally in view, would be removed out of their reach; and, in case of an attack, the marines themselves might be employed more effectually in our defence than if they were on shore.

We had now got every thing into the boats, and only the gunner, a seaman of the boat's crew, and myself, remained on shore. As the pinnace lay beyond the surf, through which we were obliged to swim, I told them to make the best of their way to it, and that I should follow them.

With this order I was surprized to find them both refuse to comply, and the consequence was a contest amongst us, who should be the last on shore. It seems that some hasty words I had just before used to the sailor, which he thought reflected on his courage, was the cause of this odd fancy in him; and the old gunner finding a point of honour started, thought he could not well avoid taking a part in it. In this ridiculous situation we might have remained some time, had not our dispute been soon settled by the stones that began to fly about us, and by the cries of the people from the boats to make haste, as the natives were following us into the water with clubs and spears. I reached the side of the pinnace first, and finding the gunner was at some distance behind, and not yet entirely out of danger, I called out to the marines to fire one musquet. In the hurry of executing my orders they fired two; and when I got into the boat, I saw the natives running away, and one man with a woman sitting by him, left behind on the beach. The man made several attempts to rise, without being able; and it was with much regret, I perceived him to be wounded in the groin. The natives soon after returned and surrounded the wounded man, brandished their spears and daggers at us with an air of threatening and defiance; but before we reached the ships, we saw some persons, whom we supposed to be the chiefs, now arrived, driving them away from the shore.

During our absence, Captain Clerke had been under the greatest anxiety for our safety. And these apprehensions were considerably increased, from his having entirely mistaken the drift of the conversation he had held with some natives who had been on board. The frequent mention of the name of Captain Cook, with other strong and circumstantial descriptions of death and destruction, made him conclude that the knowledge of the unfortunate events at Owhyhee had reached them, and that these were what they alluded to; whereas all they had in view was to make known to him the wars that had arisen, in consequence of the goats that Captain Cook had left at Onéheow, and the slaughter of the poor goats themselves, during the struggle for the property of them. Captain Clerke, applying this earnestness of conversation, and these terrible representations, to our calamitous transactions at Owhyhee, and to an indication of revenge, kept his telescope fixed upon us, and the moment he saw the smoke of the musquets, ordered the boats to be manned and armed, and to put off to our assistance.

The next morning, March 2d, I was again ordered on shore with the watering party. The risk we had run the preceding day, determined Captain Clerke to send a considerable force from both ships for our guard, amounting in all to forty men under

arms. This precaution, however, was now unnecessary; for we found the beach left entirely to ourselves, and the ground between the landing place and the lake tabooed with small white flags. We concluded, from this appearance, that some of the chiefs had certainly visited this quarter; and that, not being able to stay, they had kindly and considerately taken this step for our greater security and convenience. We saw several men armed with long spears and daggers on the other side of the river on the right, but they did not offer to give us the least molestation. Their women came over and sat down on the banks close by us, and at noon we prevailed on some of the men to bring hogs and roots for our people, and to dress them for us. As soon as we had left the beach they came down to the sea-side, and one of them threw a stone at us; but his conduct, seeming to be highly disapproved of by all the rest, we did not think it proper to shew any resentment.

The next day we completed our watering without meeting with any material difficulty. On our return to the ships, we found that several chiefs had been on board, and had made excuses for the behaviour of their countrymen, attributing their riotous conduct to the quarrels which subsisted at that time, amongst the principal people of the island. The quarrel had risen about the goats we had left at Oneeheow the last year; the right of property in which was claimed by Toneoneo, on the pretence of that island's being a dependency of his.

This, and the two following days, were employed on shore in completing the Discovery's water; and the carpenters were busy on board in caulking the ships, and in making other preparations for our next cruise. The natives desisted from giving us any further disturbance, and we procured from them a plentiful supply of pork and vegetables.

At this time an Indian brought a piece of iron on board the Discovery to be fashioned into the shape of a pabooa. It was carefully examined both by the officers and men, and appeared to be the bolt of some large ship timbers; but they were not able to discover to what nation it belonged.

On the 7th, we were surprized with a visit from Toneoneo. When he heard the dowager princess was in the ship, it was with great difficulty we could prevail on him to come on board, not from any apprehensions that he appeared to entertain of his safety, but from an unwillingness to see her. Their meeting was with sulky and lowering looks on both sides. He stayed but a short time, and seemed much dejected; but we remarked, with some surprise, that the women, both at his coming and going away, prostrated themselves before him; and that he was treated by all the natives on board with the respect usually paid to those of his rank. Indeed it must appear somewhat extraordinary, that a person who was at this time in a state of actual hostility with Teavee's party, and was even prepared for another battle, should trust himself almost alone within the power of his enemies.

On the 8th, at nine in the morning, we weighed and sailed toward Oneeheow; and at three in the afternoon, anchored in twenty fathoms water, nearly on the same spot as in the year 1778.

On the 12th, the weather being moderate, the master was sent to the north-west side of the island to look for a more convenient place for anchoring. He returned in the evening, having found a fine bay with good anchorage; also to the eastward were four small wells of good water; the road to them level, and fit for rolling casks.

As we were now about to take our final leave of the Sandwich islands, it will not be improper to introduce here some general account of them, particularly Owhyhee.

This group consists of eleven islands. They are called by the natives; 1. Owhyhee. 2. Mowee. 3. Ranai, or Ornai. 4. Morotinniee, or Morokinne. 5. Kahowrowee, or Tahoorowa. 6. Morotoi, or Morokoi. 7. Woahoo, or Oahoo. 8. Atooi, Atowi, or Towi, and sometimes Kowi. 9. Neeheehow, or Onceheow. 10. Oreehoua, or Reehoua; and 11. Tahooraa; and are all inhabited, except Morotinniee and Tahooraa. Besides the islands above enumerated, we were told by the Indians, that there is another called Modoopapapa, or Komodoopapapa, which is low and sandy, and visited only for the purpose of catching turtle and sea-fowl.

\* They were named by Captain Cook the Sandwich Islands, in honour of the Earl of Sandwich, under whose administration he had enriched geography with so many splendid and important discoveries; a tribute justly due to that noble person for the liberal support these voyages derived from his power, in whatever could extend their utility, or promote their success; for the zeal with which he seconded the views of that great navigator; and, if I may be allowed to add the voice of private gratitude, for the generous protection, which, since the death of their unfortunate commander, he has afforded all the officers that served under him.

Owhyhee, the easternmost, and by much the largest of these islands, is of a triangular shape, and nearly equilateral. Its greatest length is  $28\frac{1}{2}$  leagues; its breadth is 24 leagues; and it is about 255 geographical, or 293 English miles in circumference.

The coast to the north-east, which forms the eastern extremity of the island, is low and flat; the acclivity of the inland parts is very gradual, and the whole country covered with cocoa-nut and bread-fruit trees. This, as far as we could judge, is the finest part of the island, and we were afterward told that the King had a place of residence here. On doubling the east point of this island, we saw a mountain called Mouna Roa, which is supposed to be at least 16,020 feet high, which exceeds the height of the Pico de Teyde, or Peak of Teneriffe, by 724 feet, according to Dr. Heberden's computation.

The coast of Kaoo presents a prospect of the most horrid and dreary kind: the whole country appearing to have undergone a total change, from the effects of some dreadful convulsion. The ground is every where covered with cinders, and intersected in many places with black streaks, which seem to mark the course of a lava that has flowed, not many ages back, from the mountain Roa to the shore. The southern promontory looks like the mere dregs of a volcano. The projecting headland is composed of broken and craggy rocks, piled irregularly on one another, and terminating in sharp points.

The neighbouring sea abounds with a variety of most excellent fish, with which, as well as with other provisions, we were always plentifully supplied. Off this part of the coast we could find no ground at less than a cable's length from the shore, with a hundred and sixty fathoms of line, excepting in a small bight to the eastward of the south point.

The quadrupeds in these, as in all the other islands that have been discovered in the South Sea, are confined to three sorts, dogs, hogs, and rats. The dogs are of the same species with those of Otaheite, having short crooked legs, long backs, and pricked ears. I did not observe any variety in them, except in their skins; some having long and rough hair, and others being quite smooth. They are about the size of a common turnspit; exceedingly sluggish in their nature; though perhaps this may be more owing to the manner in which they are treated, than to any natural disposition in them. They are in general fed and left to herd with the hogs; and I do not recollect one instance in which a dog was made a companion in the manner we do in Europe. Indeed, the custom of eating them is an insuperable bar to their admission into society; and

and as there are neither beasts of prey in the island, nor objects of chase, it is probable that the social qualities of the dog, its fidelity, attachment, and sagacity, will remain unknown to the natives.

The number of dogs in these islands did not appear to be nearly equal in proportion to those in Otaheite. But, on the other hand, they abound much more in hogs; and the breed is of a larger and weightier kind. The supply of provisions of this kind, which we got from them, was really astonishing. We were near four months either cruising off the coast, or in harbour at Owhyhee. During all this time, a large allowance of fresh pork was constantly served to both crews; so that our consumption was computed at about sixty puncheons of five hundred weight each. Besides this, and the incredible waste, which, in the midst of such plenty, was not to be guarded against, sixty puncheons more were salted for sea-store. The greatest part of this supply was drawn from the island of Owhyhee alone, and yet we could not perceive that it was at all drained, or even that the abundance had any way decreased.

The birds of these islands are as beautiful as any we have seen during the voyage, and are numerous, though not various. There are four which seem to belong to the trochili, or honey-suckers of Linnæus; one of which is something larger than a bullfinch; its colour is a fine glossy black, the rump-vent and thighs a deep yellow. It is called by the natives Hoo-hoo. Another is of an exceeding bright scarlet colour; the wings black, and edged with white; and the tail black; its native name is Ee-eeve. A third, which seems to be either a young bird, or a variety of the foregoing, is variegated with red, brown, and yellow. The fourth is entirely green, with a tinge of yellow, and is called Akaiarooa. There is a species of thrush, with a grey breast; and a small bird of the fly-catcher kind; a rail, with very short wings and no tail, which, on that account, we named *Rallus caudatus*. Ravens are found here, but they are very scarce; their colour is dark brown, inclining to black; and their note is different from the European. Here are two small birds both of one genus, that are very common; one is red, and generally seen about the cocoa-nut trees, particularly when they are in flower, from whence it seems to derive great part of its subsistence; the other is green; the tongues of both are long and ciliated, or fringed at the tip. A bird with a yellow head, which, from the structure of its beak, we called a parroquet, is likewise very common. It, however, by no means belongs to that tribe, but greatly resembles the *Lexia flavicans*, or yellowish crossbill of Linnæus.

Here are also owls, plovers of two sorts, one very like the whistling plover of Europe; a large white pigeon; a bird with a long tail, whose colour is black, the vent and feathers under the wing (which is much longer than is usually seen in the generality of birds, except the birds of paradise) are yellow; and the common water or darker hen.

The inhabitants of the Sandwich islands are undoubtedly of the same race with those of New Zealand, the Society and Friendly Islands, Easter Island, and the Marquesas. This fact, which, extraordinary as it is, might be thought sufficiently proved by the striking similarity of their manners and customs, and the general resemblance of their persons is established beyond all controversy by the absolute identity of their language.

From what continent they originally emigrated, and by what steps they have spread through so vast a space, those who are curious in disquisitions of this nature, may perhaps not find it very difficult to conjecture. It has been already observed, that they bear strong marks of affinity to some of the Indian tribes that inhabit the Ladrões and Caroline islands; and the same affinity may again be traced amongst the Battas and the

Malays.



Malays. When these events happened, it is not so easy to ascertain; it was probably not very lately, as they are extremely populous, and have no tradition of their own origin, but what is perfectly fabulous; whilst, on the other hand, the unadulterated state of their general language, and the simplicity which still prevails in their customs and manners, seems to indicate that it could not have been at any very distant period.

The natives of these islands are in general above the middle size, and well made; they walk very gracefully, run nimbly, and are capable of bearing great fatigue; though, upon the whole, the men are somewhat inferior, in point of strength and activity, to the Friendly islanders, and the women less delicately limbed than those of Otaheite. Their complexion is rather darker than that of the Otaheiteans, and they are not altogether so handsome a people. However, many of both sexes had fine open countenances; and the women in particular had good eyes and teeth, and a sweetness and sensibility of look, which rendered them very engaging. Their hair is a brownish black, and neither uniformly straight, like that of the Indians of America, nor uniformly curling, as amongst the African negroes, but varying in this respect, like the hair of Europeans. One striking peculiarity, in the features of every part of this great nation, I do not remember to have seen any where mentioned; which is that, even in the handsomest faces, there is always a fulness of the nostril, without any flatness or spreading of the nose, that distinguishes them from Europeans. It is not improbable that this may be the effect of their usual mode of salutation, which is performed by pressing the ends of their noses together.

The same superiority that is observable in the persons of the Erees, through all the other islands, is found also here. Those whom we saw were, without exception, perfectly well formed; whereas the lower sort, besides their general inferiority, are subject to all the variety of make and figure that is seen in the populace of other countries. Instances of deformity are more frequent here than in many of the other islands. Whilst we were cruising off Owhyhee, two dwarfs came on board, one an old man, four feet two inches high, but exactly proportioned, and the other a woman, nearly of the same height. We afterwards saw three natives, who were hump-backed, and a young man, born without hands or feet. Squinting is also very common amongst them; and a man who they said had been born blind, was brought to us to be cured. Besides these particular imperfections, they are in general very subject to boils and ulcers, which we attributed to the great quantity of salt they eat with their flesh and fish. The Erees are very free from these complaints; but many of them suffer still more dreadful effects from the immoderate use of the ava. Those who were the most affected by it, had their bodies covered with a white scurf, their eyes red and inflamed, their limbs emaciated, the whole frame trembling and paralytic, accompanied with a disability to raise the head. Though this drug does not appear universally to shorten life, as was evident from the cases of Terreeboo, Kaoo, and some other chiefs, who were very old men, yet it invariably brings on an early and decrepid old age. It is fortunate that the use of it is made one of the peculiar privileges of the chiefs. The young son of Terreeboo, who was about twelve years old, used to boast of his being admitted to drink ava, and shewed us, with great triumph, a small spot in his side that was growing scaly.

There is something very singular in the history of this, pernicious drug. When Captain Cook first visited the Society Islands, it was very little known among them. On his second voyage, he found the use of it very prevalent at Ulietea; but it had



still gained very little ground at Otaheite. When we were last there, the dreadful havoc it had made was beyond belief, inasmuch that the captain scarce knew many of his old acquaintances. At the Friendly Islands, it is also constantly drunk by the chiefs, but so much diluted with water, that it does not appear to produce any bad effects. At Atooi also it is used with great moderation, and the chiefs are in consequence a much finer set of men there than in any of the neighbouring islands. Our good friends, Kaireekhea and old Kaoo, were persuaded by us to refrain from it; and they recovered amazingly during the short time we afterward remained in the island.

Notwithstanding the irreparable loss we suffered from the sudden resentment and violence of these people, yet, in justice to their general conduct, it must be acknowledged that they are of the most mild and affectionate disposition; equally remote from the extreme levity and fickleness of the Otaheiteans, and the distant gravity and reserve of the inhabitants of the Friendly Islands. They appear to live in the utmost harmony and friendship with one another. The women who had children, were remarkable for their tender and constant attention to them; and the men would often lend their assistance in those domestic offices, with a willingness that does credit to their feelings.

It must however be observed, that they fall very short of the other islanders, in that best test of civilization, the respect paid to the women. Here they are not only deprived of the privilege of eating with the men, but the best sorts of food are tabooed, or forbidden them. They are not allowed to eat pork, turtle, several kinds of fish, and some species of the plantains; and we were told that a poor girl got a terrible beating for having eaten, on board our ship, one of these interdicted articles. In their domestic life, they appear to live almost by themselves, and though we did not observe any instances of personal ill-treatment, yet it was evident they had little regard or attention paid them.

The great hospitality and kindness with which we were received by them, have been already frequently remarked. The old people never failed of receiving us with tears of joy; seemed highly gratified with being allowed to touch us, and were constantly making comparisons between themselves and us, with the strongest marks of humility. The young women were not less kind and engaging; and till they found, notwithstanding our utmost endeavours to prevent it, that they had reason to repent of our acquaintance, attached themselves to us without the least reserve.

In justice however to the sex, it must be observed that these ladies were probably all of the lower class of the people; for I am strongly inclined to believe, that excepting the few whose names are mentioned in the course of our narrative, we did not see any women of rank during our stay amongst them.

Their natural capacity seems in no respect below the common standard of mankind. The eager curiosity with which they attended the armourer's forge, and the many expedients they had invented, even before we left the islands, for working the iron they had procured from us, into such forms as were best adapted to their purposes, were strong proofs of dexterity and ingenuity.

We met with two instances of persons disordered in their minds; the one a man at Owhyhee, the other a woman at Onecheow. It appeared, from the particular attention and respect paid to them, that the opinion of their being inspired by the divinity, which obtains among most of the nations of the East, is also received here.

The inhabitants of these islands differ from those of the Friendly Isles, in suffering, almost universally, their beards to grow. There were indeed a few, amongst whom

was the old King, that cut it off entirely, and others that wore it only upon the upper lip. The same variety, in the manner of wearing the hair, is also observable here, as among the other islanders of the South Sea; besides which, they have a fashion, as far as we know, peculiar to themselves. They cut it close on each side of the head down to the ears.

Both sexes wear necklaces made of strings of small variegated shells; and an ornament, in the form of the handle of a cup, about two inches long, and half an inch broad, made of wood, stone, or ivory finely polished, which is hung about the neck by fine threads of twisted hair, doubled sometimes an hundred fold. Instead of this ornament, some of them wear on their breast a small human figure, made of bone, suspended in the same manner.

The custom of tattowing the body, they have in common with the rest of the natives of the South Sea islands; but it is only at New Zealand, and the Sandwich islands, that they tattow the face. They have a singular custom amongst them, the meaning of which we could never learn — that of tattowing the tip of the tongues of the females.

The dress of the men generally consists only of a piece of thick cloth called the maro, about ten or twelve inches broad, which they pass between the legs, and tie round the waist. This is the common dress of all ranks of people. Their mats, some of which are beautifully manufactured, are of various sizes, but mostly about five feet long and four broad. These they throw over their shoulders, and bring forward before; but they are seldom used, except in time of war, for which purpose they seem better adapted than for ordinary use, being of a thick and cumbersome texture, and capable of breaking the blow of a stone, or any blunt weapon. Their feet are generally bare, except when they have occasion to travel over the burnt stones, when they secure them with a sort of sandal, made of cords, twisted from the fibres of the cocoa-nut. Such is the ordinary dress of these islanders; but they have another, appropriated to their chiefs, and used on ceremonious occasions, consisting of a feathered cloak and helmet, which, in point of beauty and magnificence, is perhaps nearly equal to that of any nation in the world. These cloaks are made of different lengths in proportion to the rank of the wearer, some of them reaching no lower than the middle, others trailing on the ground. The inferior chiefs have also a short cloak, resembling the former, made of the long-tail feathers of the cock, the tropic and man-of-war birds, with a broad border of the small red and yellow feathers, and a collar of the same.

These feathered dresses seemed to be exceedingly scarce, being appropriated to persons of the highest rank, and worn by the men only.

The exact resemblance between this habit, and the cloak and helmet formerly worn by the Spaniards, was too striking not to excite our curiosity to inquire, whether there were any probable grounds for supposing it to have been borrowed from them. After exerting every means in our power of obtaining information on this subject, we found that they had no immediate knowledge of any other nation whatever, nor any tradition remaining among them of these islands having been ever visited before by such ships as ours.

The common dress of the women bears a close resemblance to that of the men. They wrap round the waist a piece of cloth that reaches half way down the thighs, and sometimes in the cool of the evening they appeared with loose pieces of fine cloth thrown over their shoulders, like the women of Otaheite. The pau is another dress very frequently worn by the younger part of the sex. It is made of the thinnest and finest sort of cloth, wrapt several times round the waist, and descending to the leg, so as to have the appearance of a full short petticoat.

Their

Their necklaces are made of shells, or of a hard, shining, red berry. Besides which, they wear wreaths of dried flowers of the Indian mallow; and another beautiful ornament, called *eraie*, which is generally put about the neck, but is sometimes tied like a garland round the hair, and sometimes worn in both these ways at once. It is a ruff, of the thickness of a finger, made in a curious manner of exceedingly small feathers, woven so close together, as to form a surface as smooth as that of the richest velvet. The ground was generally of a red colour, with alternate circles of green, yellow, and black.

At Atooi some of the women wore little figures of the turtle, neatly formed of wood or ivory, tied on their fingers in the manner we wear rings. Why this animal is thus particularly distinguished, I leave to the conjectures of the curious.

There remains to be mentioned another ornament (if such it may be called). It is a kind of mask, made of a large gourd, with holes cut in it for the eyes and nose. The top was stuck full of small green twigs, which, at a distance, had the appearance of an elegant waving plume; and from the lower part hung narrow stripes of cloth, resembling a beard. We never saw these masks worn but twice, and both times by a number of people together in a canoe, who came to the side of the ship, laughing and drolling, with an air of masquerading.

The food of the lower class of people consists principally of fish and vegetables; such as yams, sweet potatoes, taro, plantains, sugar-canes, and bread-fruit. To these the people of a higher rank add the flesh of hogs and dogs, dressed in the same manner as at the Society Islands. They also eat fowls of the same domestic kind with ours; but they are neither plentiful nor much esteemed by them. Their fish they salt, and preserve in gourd-shells; not as we at first imagined for the purpose of providing against any temporary scarcity, but from the preference they give to salted meats. For we also found that the erees used to pickle pieces of pork in the same manner, and esteemed it a great delicacy.

They are exceedingly cleanly at their meals; and their mode of dressing both their animal and vegetable food, was universally allowed to be greatly superior to ours. The chiefs constantly begin their meal with a dose of the extract of pepper-root, brewed after the usual manner. The women eat apart from the men, and are tabooed, or forbidden, as has been already mentioned, the use of pork, turtle, and particular kinds of plantains.

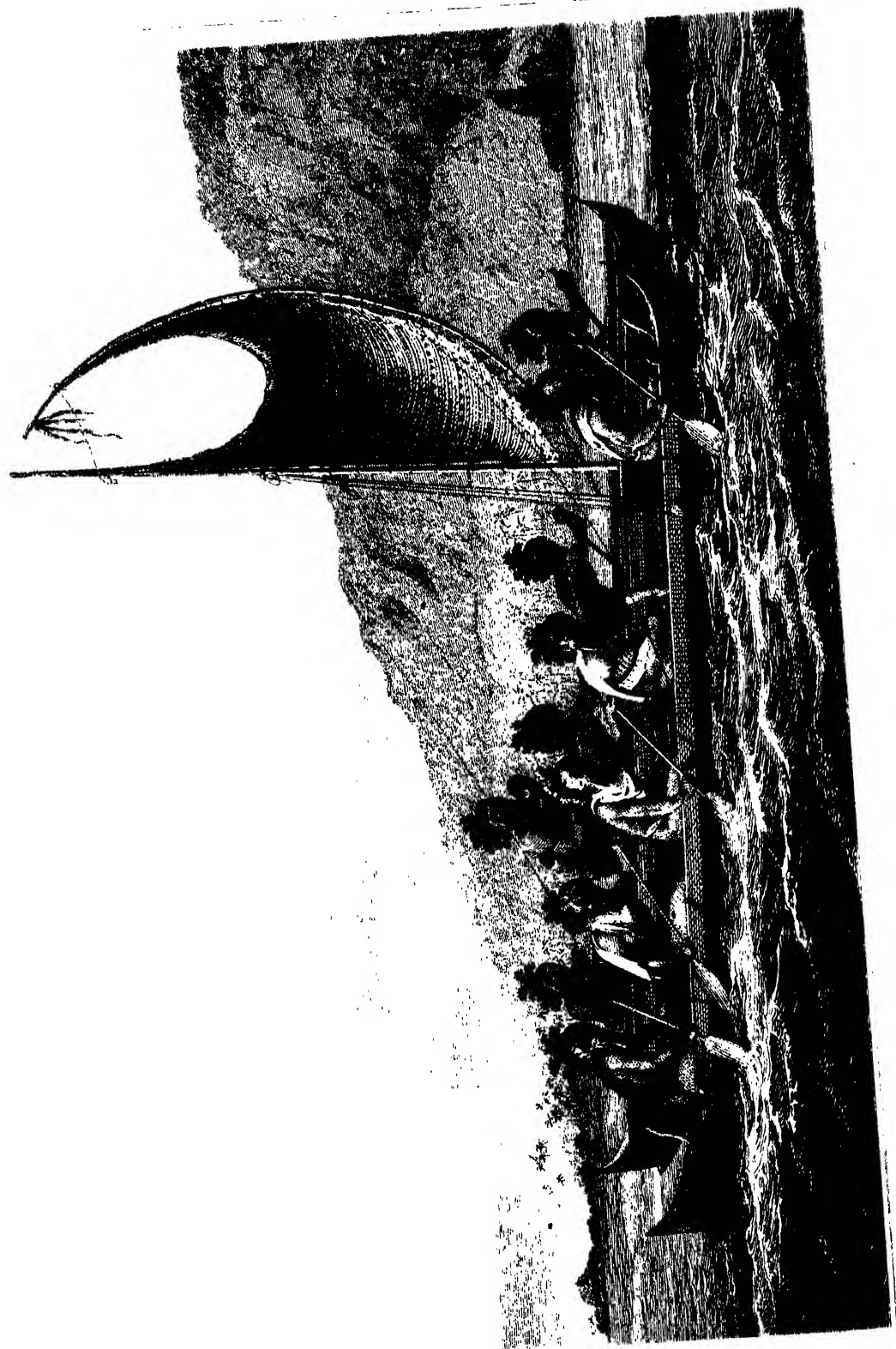
The way of spending their time appears to be very simple, and to admit of little variety. They rise with the sun, and, after enjoying the cool of the evening, retire to rest a few hours after sunset. The making of canoes and mats forms the occupation of the Erees; the women are employed in manufacturing cloth, and the Towtows are principally engaged in the plantations and fishing.

Their music is of a rude kind, having neither flutes nor reeds, nor instruments of any other sort that we saw, except drums of various sizes. But their songs, which they sung in parts, and accompany with a gentle motion of the arms, in the same manner as the Friendly islanders, had a very pleasing effect.

It is very remarkable that the people of these islands are great gamblers. They have a game very much like our draughts; but, if one may judge from the number of squares, it is much more intricate. The board is about two feet long, and is divided into two hundred and thirty-eight squares; of which there are fourteen in a row, and they make use of black and white pebbles, which they move from square to square.

There is another game, which consists in hiding a stone under a piece of cloth, which one of the parties spreads out and rumples in such a manner that the place where the stone





stone lies is difficult to be distinguished. The antagonist with a stick, then strikes the part of the cloth where he imagines the stone to be, and as the chances are upon the whole considerably against his hitting it, odds, of all degrees, varying with the opinion of the skill of the players, are laid on the side of him who hides.

Besides these games they frequently amuse themselves with racing-matches between the boys and girls, where again they wage with great spirit. I saw a man, in a most violent rage, beating his hair and beating his breast, after losing three hatchets at one of these races, which he had just before purchased from us, with half his substance.

Swimming is not only a necessary art, in which both their men and women are more expert than any people I had hitherto seen, but a favourite diversion amongst them. One particular mode, in which they sometimes amused themselves with this exercise in Kurakakoo Bay, appeared to us most perilous and extraordinary, and well deserving a distinct relation.

The surf which breaks on the coast round the bay, extends to the distance of about one hundred and fifty yards from the shore, within which space, the surges of the sea, accumulating from the shallowness of the water, are dashed against the beach with prodigious violence. Whenever from stormy weather, or any extraordinary swell at sea, the impetuosity of the surf is increased to its utmost height, they chuse that time for this amusement, which is performed in the following manner: Twenty or thirty of the natives, taking each a narrow board rounded at the ends, set out together from the shore. The first wave they meet they plunge under, and suffering it to roll over them, rise again beyond it, and make the best of their way by swimming out into the sea. The second wave is encountered in the same manner with the first; the great difficulty consisting in seizing the proper moment of diving under it, which, if missed, the person is caught by the surf, and driven back again with great violence, and all his dexterity is then required to prevent himself from being dashed against the rocks. As soon as they have gained, by these repeated efforts, the middle of the water beyond the surf, they lay themselves at length on their board and prepare for their return. As the surf consists of a number of waves, of which every third is remarkable to be always much larger than the others, and to flow higher on the shore; the rest breaking in the intermediate space, their first object is to place themselves on the summit of the largest surge, by which they are driven along with amazing rapidity toward the shore. If by mistake they should place themselves on one of the smaller waves, which break before they reach the land, or should not be able to keep their board in a proper direction to the top of the swell, they are left exposed to the fury of the surf, and to avoid it are obliged again to dive and regain the place from which they set out. Those who succeed in their object of reaching the shore, have still the greatest danger to encounter. The coast being guarded by a chain of rocks, with here and there a small opening between them, they are obliged to steer their board through one of these, or, in case of failure, to quit it before they reach the rocks, and plunging under the waves make the best of their way back again. This is reckoned very disgraceful, and also attended with the loss of the board, which I have often seen with great terror, and to the very moment the islander quitted it. The boldness and address, which is necessary for them to perform these difficult and dangerous manœuvres, was altogether new to me, and is scarcely to be credited.

An account of this game as a near spectator, shews at how early a period they are so far familiar with it, as to be both to lose all fears of it, and to set its dangers at defiance. A single instance of this I met in which was a woman with her children, one of them, an infant, who was not more than four years old, seemed highly delighted with

with what had happened, swimming about at its ease, and playing a hundred tricks, till the canoe was put to rights again.

Besides the amusements I have already mentioned, the young children have one which was much played at, and shewed no small degree of dexterity. They take a short stick with a peg sharpened at both ends, running through one extremity of it, and extending about an inch on each side; and throwing up a ball made of green leaves moulded together, and secured with twine, they catch it on the point of the peg; and immediately, throwing it up again from the peg, they turn the stick round, and thus keep catching it on each peg alternately, without missing it, for a considerable time. They are not less expert at another game of the same nature, tossing up in the air, and catching in their turns, a number of these balls; so that we frequently saw little children thus keep in motion five at a time. With this latter play the young people likewise divert themselves at the Friendly islands.

Their cloth is made of the same materials, and in the same manner as at the Friendly and Society islands. That which is designed to be painted, is of a thick and strong texture, several folds being beat and incorporated together; after which it is cut in breadths about two or three feet wide, and is painted with great taste and regularity of design.

The business of painting belongs entirely to the women, and is called kipparee; and it is remarkable that they always give the same name to our writing. The young women would often take the pen out of our hands, and shew us that they knew the use of it as well as we did, at the same time telling us that our pens were not so good as theirs. They looked upon a sheet of written paper, as a piece of cloth striped after the fashion of our country, and it was not without the utmost difficulty that we could make them understand that our figures had a meaning in them which theirs had not.

Their mats are made of the leaves of the pandanus; and, as well as their cloths, are beautifully worked in a variety of patterns, and stained of different colours. Some have a ground of pale green, spotted with squares, of romboïds of red; others are of a straw colour, spotted with green, and others are worked with beautiful stripes, either in straight or waving lines of red and brown. In this article of manufacture, whether we regard the strength, fineness, or beauty, they certainly excel the whole world.

Their fishing-hooks are made of mother-of-pearl, bone, or wood, pointed and barbed with small bones, or tortoise-shell. They are of various sizes and forms; but the most common are about three inches long. Considering the materials of which these hooks are made, their strength and neatness are really astonishing; and in fact we found them, upon trial, much superior to our own.

The line which they use for fishing, for making nets, and for other domestic purposes, is of different degrees of fineness, and is made of the bark of the touta, or cloth-tree, neatly and evenly twisted in the same manner as our common twine. They have a finer sort, made of the bark of a small shrub called areemah; and the finest is made of human hair.

The gourds, which grow to so enormous a size, that some of them are capable of containing from ten to twelve gallons, are applied to all manner of domestic purposes; and in order to fit them the better to their respective uses, they have the ingenuity to give them different forms, by tying bandages round them during their growth. Thus, some of them are of a long cylindrical form, as best adapted to contain their fishing tackle; others are of a dish form, and these serve to hold their salt, and salted provisions, their puddings, vegetables, &c. which two sorts have neat close covers, made likewise of the gourd; others again are exactly the shape of a bottle with a long neck, and in these they keep



keep their water. They have likewise a method of ~~scoring them with a heated instrument~~, so as to give them the appearance of being painted, in a variety of neat and elegant designs.

The people of these islands are manifestly divided into three classes. The first are the Erees, or chiefs, of each district; one of whom is superior to the rest, and is called at Owhyhee Eree-taboo, and Eree Moece. By the first of these words they express his absolute authority; and by the latter, all are obliged to prostrate themselves (or put themselves to sleep, as the word signifies) in his presence. The second class are those who appear to enjoy a right of property, without authority. The third are the towtoos, or servants, who have neither rank nor property.

The great power and high rank of Terreeoboo, the Eree-taboo of Owhyhee, was very evident from the manner in which he was received at Karakakooa, on his first arrival. All the natives were seen prostrated at the entrance of their houses; and the canoes for two days before were tabooed, or forbidden to go out, till he took off the restraint.

The chiefs exercise their power over one another in the most <sup>haughty</sup> and oppressive manner. Of this I shall give two instances. A chief of the lower order had behaved with great civility to one of our officers; and in return I carried him on board, and introduced him to Captain Cook, who invited him to dine with us. While we were at table, Pareea, who was chief of a superior order, entered, whose face but too plainly manifested his indignation at seeing our guest in so honourable a situation. He immediately seized him by the hair of the head, and was proceeding to drag him out of the cabin, when the captain interfered; and after a deal of altercation, all the indulgence we could obtain, without coming to a quarrel with Pareea, was that our guest should be suffered to remain, being seated upon the floor, whilst Pareea filled his place at the table. At another time, when Terreeoboo first came on board the Resolution, Maiha-Maiha, who attended him, finding Pareea on deck, turned him out of the ship in the most ignominious manner.

The religion of these people resembles, in most of its principal features, that of the Society and Friendly Islands. Their morais, their whattas, their idols, their sacrifices, and their sacred songs, all of which they have in common with each other, are convincing proofs that their religious notions are derived from the same source.

It has been mentioned, that the title of Orono, with all its honours, was given to Captain Cook; and it is also certain that they regarded us, generally, as a race of people superior to themselves; and used often to say, that the great Eatooa dwelled in our country. The little image we have before mentioned, they said, was Terreeoboo's god; and that he also resided amongst us. They called him Koonoorakaiee.

In a bay to the southward of Karakakooa, a party of our gentlemen were conducted to a large house, in which they found the black figure of a man, resting on his fingers and toes, with his head inclined backward; the limbs well formed and exactly proportioned, and the whole beautifully polished. This figure the natives called Maee; and round it were placed thirteen others of rude and distorted shapes, which they said were the Eatooos of several deceased chiefs, whose names they recounted. The place was full of whattas, on which lay the remains of their offerings. They likewise give a place in their houses to many ludicrous and some obscene idols, like the Priapus of the ancients.

Human sacrifices are more frequent here, according to the account of the natives themselves, than in any other islands we visited. These horrid rites are not only had recourse to upon the commencement of war, and preceding great battles,

and other signal enterprizes; but the death of any considerable chief calls for a sacrifice of one or more tow-tows, according to his rank; and we were told that men have sometimes suffered on the death of Terreeoboo.

To the same of their customs may also be referred that of knocking out their fore-teeth, as a voluntary sacrifice to the Eatooa, to avert any danger or mischief to which they might be exposed.

The word *taboo* implies, laying restraint upon persons and things. Thus they say the natives were tabooed, or the bay was tabooed, and so of the rest. This word is applied to express any thing sacred, or eminent, or devoted. Thus the King of Owhyhee was called *Iree-taboo*; a human victim, *tangata-taboo*; and in the same manner among the Friendly Islanders, Tonga, the island where the King resides, is named *Tonga-taboo*. The women are said to be tabooed, when they are forbidden to eat certain kinds of meat.





# HISTORICAL RELATION OF A VOYAGE UNDERTAKEN FOR THE DISCOVERY OF SOUTHERN LANDS.

[From the French of M. Peron, one of the Naturalists appointed by the French Government to accompany the Expedition.]

THIS narrative, presented by M. Peron to the Imperial Institute on the 6th of June 1806, received highly flattering approbation, and from the report of the Institute was ordered to be printed at the expence of government by His Majesty the Emperor and King.

## BOOK I.

FROM FRANCE TO THE ISLE OF FRANCE, INCLUSIVELY.

CHAP. I. — *The general Plan and Object of the Voyage, and the Individuals of which the Expedition was composed.*

[From 22d March to 19th October 1800.]

FROM the era that discoveries in the sciences have with justice been placed among the principal evidences of the glory and prosperity of nations, a liberal concurrence among them has become established, and a new career has been opened to the rivalry of governments; a rivalry the more honourable from its real utility to all. In efforts of this nature, England in particular has of late shewn herself conspicuous; and in the glorious struggle, France alone has been able to contend with her successfully for triumph and superiority.

Nevertheless, it must be allowed, that the learned of England, ranging through the immense field presented by a fifth portion of the world, were, in many respects, on the point of fixing the voice of Europe in favour of their country. The successful labours of Banks, Solander, Sparman, of the two Forsters, Anderson, Menzies, White, Smith, Collins, Paterson, &c. began to render New Holland a subject of interest to an object of the meditations of all the friends of science. So many remarkable things had already been brought from this southern continent! So many were the valuable observations which had rapidly attracted notice!

In such a state of things, national honour and the progress of science with us, combined to claim an expedition of discovery to the southern lands; and the Institute of France conceived it a duty to propose the measure to the government.

At this epoch war seemed to have redoubled its rage; the political existence of France was menaced; its territory invaded: but already Buonaparte was First Consul; he listened with interest to the proposition of the Institute, which had now for several years prided itself in reckoning him among its members; and at the very instant the army of reserve was about to pass the Alps, he issued his orders to hasten the execution of this grand enterprise.

In a short time twenty-three individuals, appointed by himself at the recommendation of the Institute, were destined to scientific enquiries: never before had there been such an extensive equipment of this component part of voyages of discovery; never had the means for a successful issue been prepared before upon so grand a scale. Astronomers, geographers, mineralogists, botanists, zoologists, artists for designing; of each of these the associates were two, three, or even five.

This part of the labours of the expedition was the more interesting from the nature of the regions about to be visited. In latitudes corresponding with those of our climates on a vast continent, on the numerous islands attached to it, it could but happen that many useful vegetables, many curious animals would be found, which, transported to European shores, might readily be naturalized, and furnish new resources to our wants, additional assistance to the arts, and to our enjoyments alient unknown before.

The advantageous results to be expected from the component parts of the expedition, and the object it had in view, appeared to be secured by the plan of operations; whatever could be gained from the experience of preceding navigators with respect to the regions we should have to traverse, and all that theory and reasoning could deduce from or add to this experience, were collected for the base of this important work: irregular winds, monsoons, currents, each was computed with such exact precision, that the reverses we afterwards experienced were wholly to be attributed to the obstinacy of our chief, and his swerving from our valuable instructions.

According to the plan digested, we were to touch at the Isle of France, take up there a third vessel of inferior size, bear away afterwards towards the southern extremity of Van Diemen's Land, double the South Cape, examine at all points the channel D'Entrecasteaux, ascend as high as possible up all the rivers of this part of Van Diemen's Land, reconnoitre the whole eastern coast of that large island, penetrate into Bass's Straits by Banks's Straits, and determine with the utmost nicety the points of entrance and departure of the former of these straits, fix the precise position and extent of Hunter's Islands, steer afterwards to the south-west coast of New Holland and coast along it to the point where D'Entrecasteaux finished, pass at the back of the islands St. Peter and St. Francis, and visit that portion of the continent covered by these islands where a strait was supposed to exist communicating with the bottom of the great gulf of Carpentaria, and which consequently would have divided New Holland into two great islands of nearly equal dimensions. This first part of our work completed, we were afterwards to steer for Cape Leuwin, and the unknown coast north of this point; and to determine next the chief positions of Leuwin's Land, of Edel's and Endracht's Land, which were but vaguely laid down by the more ancient navigators, and the geography of which must necessarily participate of the imperfection of the methods and instruments in their time: we were further to ascend the river of Swans as high as possible; make an exact draught of the island Rottneest and the neighbouring coast; visit the tremendous Abrolhos, so fatal to Pellar; complete the draught of Shark's Bay; ascertain different positions on De Witt's Land, and along the north-west coast, especially the entrance of King William's River, Rosemary lands, &c. terminating at length this long and first campaign at the north-west

cape of New Holland. From this last point making sail for the Moluccas, we were to winter at Timor or Amboyna.

From one or the other of these islands, passing north of Ceram, we were ordered to make the south-west coast of New Guinea, and reconnoitre it to the point where Cook stopped, behind which a strait was supposed to exist, dividing New Guinea into several islands; descending again towards Endeavour's Straits, we were to make land at the eastern point of the great gulf of Carpentaria, enter the gulf, and determine the chief spots in it, ascertain the position of several islands marked on old charts, and visit the mouths of that heap of pretended rivers, noticed in the ancient plan of the gulf, into which no one, for so great a length of time, had penetrated; coasting then the land of Arnheim, and Diemen's Northern Land, we were to conclude our second voyage at the same north-west cape at which the first terminated; traversing then the Indian ocean, and ascertaining the yet very uncertain longitude of Trial islands, we had orders to proceed a second time to the Isle of France; thence, in our passage home to Europe, which was calculated to take place in the spring of 1803, our tedious labours were to terminate in a useful manner with the ascertainment of a portion of the eastern coast of Africa, respecting the position of which, among geographers, some doubt yet remained.

Such was the general plan traced by the government for our chief; a plan the execution of which *ad literam* would have rendered this voyage one of the most rapid and fruitful that has ever been made. I shall detail in succession, and in the order of the epochs at which they took place, the modifications it experienced; a judgment, however, may even now be formed, from the succinct exposure I have made, of the importance of this expedition to navigation and geography: more than five thousand sea-leagues of coast, either wholly unknown or very badly laid down, were to be explored minutely; never, if Vancouver be excepted, had any navigator a more difficult mission. In fact, it is not in voyages on the high seas, however long they be, that adverse circumstances or shipwreck are so much to be dreaded; those, on the contrary, along unknown shores, and barbarous coasts, at every instant present new difficulties to encounter, with perpetual danger. These difficulties and these dangers, the woeful appendage of all expeditions begun for the purpose of geographic detail, were of more imminent character from the nature of the coasts we had to explore: for, no country has hitherto been discovered more difficult to reconnoitre than New Holland, and all the voyages of any extent made for the purpose in this part have been marked either by reverses, or infructuous attempts: for example, Pelsur on the western coast was one of the first victims of these shores; Vlaming speaks of wrecks by which Rotneest island was covered when he landed there in 1697; and we ourselves observed others of much more recent date; Captain Dampier, notwithstanding his intrepidity and experience, could not preserve his vessel from grounding when off the north-west coast of this continent, a coast already famous for the shipwreck of Vianen; on the east Bougainville, menaced with destruction, was constrained to precipitate flight; Cook escaped by a kind of miracle, the rock which pierced his ship remaining in the breach it made, and alone preventing it from sinking; on the south-west Vancouver and, D'Entrecasteaux were not more fortunate in their several plans of completing its geography, and the French admiral nearly lost both his ships. Towards the south, but a few years have elapsed since the discovery of Bass's Straits, and already the major part of the islands of this Strait are strewed with the wrecks of ships: very recently, and almost before our face I may say, the French ship *Enterprize* was dashed to pieces against the dangerous islands which close its eastern opening. The relation of our voyage, and the dangers we incurred, will still farther demonstrate the perils of this navigation; and the loss of the



two vessels of Captain Flinders, sent by the English government to compete with us, will but too clearly furnish a new and lamentable evidence. Still, spite of so many unfavourable circumstances, the geographical part of our labours are not the less interesting ; and it will no doubt be easy for me to prove, by the narrative of our operations of this description, how much they do honour to the French navy.

Two vessels were made ready for this expedition in the port of Havre : *Le Geographe*, a handsome corvette mounting 30 guns, drawing from fifteen to sixteen feet water, and an excellent sailer, but too sharp-built perhaps to admit of its grounding once or often times without danger ; *Le Naturaliste*, a large, strong, and broad built vessel of nearly similar draught of water to that of *Le Geographe*, a slower sailer, but of very solid structure, and on this score far preferable to the corvette.

Nothing was neglected in the excellence and abundance of our stock of provisions ; the magazines at Havre were placed at the disposal of our commander ; considerable sums were granted him for the purchase of choice wines, liquors, sirups, sweetmeats of various kinds, Italian cakes, soup-cakes, acid of lemon in crystals, robe of beer, &c. Filtering machines invented by Schmidt, stoves with ventilaters, hand-mills, and different apparatus for distilling, were put on board each vessel ; while instructions of great value were issued by Mr. Keraudrin, first physician of the navy, for the preservation of health. Our numerous instruments of astronomy, physical instruments, and those requisite for the meteorological and geographical departments, were the work of the most eminent artists of the capital ; the materia of the chymists, painters, and draughtsmen, were of the first quality ; a numerous library, composed of the best works relating to the sea, to astronomy, geography, physics, natural history, and voyages, was prepared for each vessel ; for the instructions relative to scientific researches it will be sufficient to notice, in order to ascertain how precious and complete they were, that they were the compilation of a commission of the Institute, formed of Messrs. Fleurieu, Lacépède, Laplace, Bougainville, Cuvier, Jussieu, Lelièvre, Camus and Langlès ; Mr. Degerands, a member of the same learned society, digested for us an interesting work on the method to be followed in our observations on uncivilized people ; a national medal was struck to commemorate this grand enterprise ; the most flattering passports were furnished by all the governments of Europe ; an unlimited credit was opened for us with the principal colonies of Africa and Asia ; in one word, the august chief, under the auspices of whom this important voyage was about to be undertaken, had given directions that nothing should be omitted which might tend to the preservation of man, facilitate our labours, and guarantee our independence. Lastly, the most liberal promises, repeated on every page of the instructions of government, held out to zeal and assiduity, those honourable rewards, those flattering distinctions, which have always been the meed of similar voyages, and which alone can indemnify the man of worth for the privations and calamities to which he exposes himself.

Nations, the knowledge of which is interesting, inhabit the distant shores we were about to visit ; it was the wish of the First Consul that we should appear among them as friends, and benefactors. Under his directions we carried with us pairs of the most useful animals, plants in abundance of the most valuable trees, seeds congenial to the temperature of those climates, instruments of various kinds most necessary to man, cloaths and ornaments of every description ; and the most extraordinary inventions of optics, physics, and chemistry, destined either for their service or amusement.

These numerous articles put in order, and the equipment of the vessels complete, the naturalists were ordered, in the beginning of September 1800, to repair to Havre. I

was

was of the number of these, a fifth place as zoologist having been assigned to me at the recommendation of several distinguished men of learning.

The officers of this expedition were selected with great care from the different ports; the midshipmen, before they were received, underwent rigorous examinations, and were, all of them, worthy of the distinction, as flattering as it was coveted, which they received. It was not the officers alone, however, that were choice; the inferior ranks had been sought for with avidity, and many of them were filled by young people of the most respectable families in Normandy, impelled by the anxiety peculiar to youth of acquiring knowledge, and of making one in these distant voyages, which ever wear a character of greatness and singularity, and enforce that respect they constantly merit and obtain. Among these interesting young men was my coadjutor and estimable friend M. Lefueur, that dear companion of my dangers, my sacrifices, and my zeal.

Besides the officers there was, on board the *Naturaliste*, a personage sufficiently well known, whose name was A-sam, a Chinese born at Can-toong. Taken prisoner, in a vessel belonging to the English company, by a French cruizer, A-sam had successively passed from hospital to hospital until he reached that of Val-de-Grace. The presence of a Chinese in the capital produced too great an effect long to remain unknown to the First Consul. From the instant it was intimated to him A-sam was rendered free and happy; every species of comfort was lavished on him during his residence at Paris; and to crown his liberality the First Consul directed that A-sam should be restored to his country, and family, and should be treated as an officer on board our ship; the administrators of government in the Isle of France were also ordered to continue towards him a similar attention until a favourable opportunity should present itself for his return to China. Happy the nations in which the unfortunate foreigner receives a like protection! Blest the chief thus generous and beneficent!

## CHAP. II. — *Passage from Havre to the Canary Islands :—Stay at Teneriffe.* \*

[From 19th October to 13th November 1800.]

THE wind and tide favouring, on the 19th of October in the morning, orders were given for the two vessels to weigh anchor; the American frigate, the *Portsmouth*, carrying back to the United States the ambassadors who had just concluded peace, sailed at the same time. At nine we passed before the tower of Francis I. A numerous band of music on its summit gave us a farewell greeting: a multitude of people from every quarter covered the shore, each individual bidding us adieu in gesture as in words, and putting up prayers for our success, each seeming to say, "May you, more fortunate than Marion, Surville, Saint-Allouarn, La Perouse and D'Entrecasteaux, return to your country and your grateful fellow citizens!"

At ten, being without the jetties, we took our powder on board; and, hoisting all sail to reach the English frigate *Profelitte* which was cruising before the port, we shewed our passport to the officer in command, and continued our course.

On the 25th, the dispersion of the fog we had constantly experienced through the channel, and the ascent of the thermometer, sufficiently indicated our approach to warmer climes; the temperature had progressively increased from 8 to 12°\*: we were now in the Bay of Biscay almost under the parallel of Bourdeaux.

On the 27th we reckoned ourselves in the latitude of Cape Finisterre, well known as the most western point of Spain; and of continental Europe.

\* M. Peron has omitted to state, whether the thermometer used was that of Reaumur, or the centigrade, which is that of Celsius. After-observations render probable it was that of Reaumur. T.R.

We were soon after abreast of that Lusitania, the happiness and fecundity of which is consecrated with so much eloquence, and so pleasingly, by the elegant and sensible author of *Telemachus*. The sky was more serene, the waves more calm, a milder and more genial air was breathed; every thing, in short, seemed to have combined to recall the smiling pictures of Fenelon. The thermometer already stood at  $15^{\circ}$ : the barometer, from our departure from Havre, had progressively fallen two lines, and now stood at  $28^{\circ} 5'$ .

The 30th, we passed the latitude of the Strait of Gibraltar. The remainder of the day, and the next, we continued our course along the coast of Africa, distant about fifty leagues.

At length, on the 1st of November, at six in the evening, we had the long wished for sight of Peak Teïda, the Mount Nivaria of the ancients. In midst of the islands Palma, Ferro, Gomera, westward, and, eastward, those of Canary, Fuertaventura, and Lancerotta, rises that point so famous, known as the Peak of Teneriffe. Its broad base was at this time enveloped in clouds, while its summit, illuminated by the last rays of the declining sun, towered above them in majesty. This mountain is not, assuredly, as many travellers, too much acted upon by enthusiasm, have ignorantly affirmed, the loftiest of the globe; its height, in fact, above the level of the sea, does not exceed 2000 toises\*, and, consequently, is inferior to that of Mont Blanc, of several mountains of Sweden, Norway†, and, in America, to ten or twelve points of the Andes; Antisana, for example, and Chimborazo are loftier by a third; but it must be allowed, that the insular position of this peak, the presence of the famous islands which it announces at a distance, the remembrance it excites, the grand catastrophes it proclaims, and of which it is itself a wonderful example; all concur to give it an importance above any other mountain on the surface of the globe.

While the eyes of every one were fixed on this gigantic mountain, we continually were nearing it more and more: in a little time we distinguished Lancerotta, Fuertaventura, and the Great Canary, which shewed itself in the horizon like an immense cone, much flattened at its summit. Sailing with a favourable wind we hoped to reach an anchorage before the fall of evening; but, failing in this, we made several tacks during the night, and at day break, the succeeding day, steered for land, which we shortly attained.

Let the reader figure to himself a steep shore, black, and deeply furrowed by torrents, without other trace of vegetation than some stunted branches of *Cacalia*, *Cactus* and *Euphorbia*; beyond this inhospitable coast, tiers of mountains rising one above the other to a great height, alike destitute of verdure, bristling with sharp peaks, their ridges and their flanks rough with scattered rocks; and, beyond these mountains, the peak of Teïda, rising like an enormous Colossus above them; and he will have a just idea of the aspect of Teneriffe from the point of Anaga, where we made the land: thence, to Santa Cruz, where we anchored, the same wild appearance is repeated; every where are seen land, scorix, and steep and barren rocks: a few wretched dwellings, scattered at the foot of these volcanic wastes, serve but to increase the mournfulness

\* 12,789 English feet.

† This is a mis-statement of M. Peron; the highest points of the mountains of Sweden and Norway are found in the long chain which divides the two countries; of these *Monte Ala*, near lake Fœrœund, and *Rœtturick*, are among the highest, but have not a greater elevation than 6000 English feet, nor are there certainly any which exceed 8000. If Mont Blanc be excepted, 15,005 English feet above the level of the sea, there is no mountain in Europe more lofty than the Peak of Teneriffe, provided its height be 2000 toises. Next to this rank *Mulhacén*, and the *Pico de Venêta*, in the *Sierra Nevada* of the *Alpujarras* of Grenada in Spain, the former 11,688, and the latter 11,388 feet high, elevations superior to that of *Ætna* or the mountains of the Alps of Swizzreland. TR.

of the scenery in this part of the island. Far different this, without doubt, to those pleasing pictures of the Fortunate Islands, described in succession with so much elegance by Horace\*, Viana, Cañasco, the immortal author of *Jerusalem Delivered*, and the writer of the poem *Dell' Oceano* ; but these pleasing delusions, these smiling images, to keep their ground in spite of truth, had occasion for the veil of mystery, the interest they have excited for centuries, and to be at distance from where they were admired : in the present day, the Canaries, despoiled of those brilliant titles affixed to them by ancient fame, no longer possess any other interest than what they derive from their wines, their advantageous position, and the physical and political revolutions of which they have been the theatre.

By keeping at a short distance from the shore, coasting along Anaga, we in a little time distinguished the anchorage and town of Santa Cruz. At ten in the morning we anchored in twenty-two fathoms, with a bottom of volcanic sand, black and mixed with mud.

The extensive range I have to describe will prevent my dwelling long on the Canary islands ; their position in midst of the Atlantic ocean has subjected them to the remarks of a variety of modern travellers, equally valuable for their talents and veracity ; there exists moreover a Spanish work on this archipelago, in three volumes 8vo., by Joseph de Viera y Clavijo, in which every subject relative to the ancient and modern history of these islands, their physical and political revolutions, their population, various productions, temperature, &c. appears to be exhausted. The history of the conquest of the Canaries with justice fills a considerable portion of this work of Clavijo ; for what can be more interesting or affecting than the unfortunate Guanches, armed with stakes and clubs, fighting for near a century with Frenchmen, Portuguese, and Spaniards ; opposing intrepidity and firmness to numbers, to superior arms, and to their squadrons of horse ; and causing the possession of their wretched islands to be purchased, by more frequent combats, and greater effusion of blood, than did afterwards the possession of the New World†.

On these accounts I shall restrict myself at present to a very small number of points, which seem to have escaped the numerous writers who have hitherto written on this archipelago.

The most common maladies, those which may be regarded as endemical, are obstinate gastric affections, oftentimes complicated with loss of strength ; putrid and chronic diarrhoeas ; low and debilitating fevers ; scorbutic cachexies ; cutaneous eruptions of different kinds, that is to say, the itch, with which numbers are dreadfully afflicted, and an affection, much more dangerous, but very analogous, as it is said, to the elephantiasis. The whole of these maladies, which most particularly the lowest order of the people are subject to, seem to have but one origin, the faulty nutriment common through the country. The food of the people, in fact, is composed principally of *gofio*, a sort of paste which almost generally is the substitute for bread, and is reputed to have been adopted from the Guanches. The paste is made with the flour of barley or wheat,

\* Who never mentions them. TR.

† Another error : M. Peron, like the generality of the French, does not confine himself to what he is acquainted with, and exceeding this, is frequently in the wrong : whoever has read the account of the *Aracans*, by Molina, will there see, that notwithstanding numerous battles and immense slaughter, this nation of Chili, a prototype of the ancient Germans, was, on the first invasion of the Spaniards, not only brave and firm, but, what is more, unconquered, as they still remain to be at the present day. The Spaniards, in their different battles with this people, have lost a greater number of men, not only than the whole amount of Europeans who perished in the subjugation of the Canaries, but than the whole population of these islands at that period amounted to. TR.

parched on fire, pounded, and moistened with water, milk, and honey. The rest of their food consists, with little else, of salt fish, caught off the coast of Barbary, which, dried in the sun, is afterwards stored in large magazines, and for want of due attention, from being laid in heaps, and from the heat of the climate, speedily becomes subject to a decomposition of less or greater rapidity. The infectious smell, exhaled by their large heaps of fish in a state of fermentation, to strangers is insupportable; and the offensive odour pursues them through every quarter of the town. The cheapness of this salt fish renders the consumption of it through the whole of the Canary Islands prodigiously great; but the advantage of this plenteousness is lamentably countervailed by the maladies I have described, all of which appear to result in great measure from the saline, acrimonious, and putrid quality of this food.

To the same cause, perhaps, is to be attributed the cachectic physiognomy, the oily, and, if the expression may be used, livid complexion which most travellers have remarked in the people of Santa Cruz. The quality of the water used in common through these islands may nevertheless have influence in producing the affections to which I advert: for, owing to the scarcity of springs (the greater part dried up in the summer), the inhabitants are obliged to collect rain water in large cisterns, which, by its stagnation during several months, cannot fail of undergoing a change, more or less deleterious to the animal economy.

As for venereal complaints, they are unusually prevalent at Teneriffe; this is to be ascribed collectively to the heat of the climate, the indolence of the inhabitants, their abominable neglect of cleanliness, the number of soldiers, and of sailors, who flock hither from all quarters of the globe, the total absence of all police, the little knowledge of the majority of the medical part of the community, and, above all, the shocking abundance of prostitutes, who, in the streets, on the quays, and even in the temples, unremittingly pursue the stranger, to barter for the vilest return their perfidious pleasures; lamentable sources of long and bitter remorse! Diseases of this nature are, in fact, the more dangerous in this country, from their being frequently complicated with the most inveterate itch.

Owing to the ancients, who had no very exact idea respecting the Canaries, having made them the residence of the blest, enthusiastic individuals have been tempted to renovate the fanciful descriptions of poetry and ancient mythology in speaking of them. Hence, very recently, we have seen these islands celebrated for their fertility, in a manner repugnant at once to truth and reason.

In fact, one of the first elements of fertility is water: now, the scarcity of this is so general throughout the whole of the Canary Islands, that not any one of them possesses what may properly be termed a river; and the springs, during summer, are so constantly dry, that the inhabitants are every where obliged to depend on cisterns for their drink. This scarcity of water, moreover, is a consequence so immediately depending on the nature of the soil, and its general disposition, as to defy a remedy, either on the part of individuals, or of the government. The small extent of the islands, the long and narrow figure of the major part of them, the enormous height of the mountains by which they are covered on all points, the depth of the vallies, their rapid declination towards the sea, and above all, their little length, all concur to oppose the formation of rivers, or even of rivulets, however small. At the same time, the quality of the soil, almost constantly basaltic, preventing the filtration of water through its surface, the rains which fall are speedily evaporated by the heat of the atmosphere.

These physical obstacles to the general fertility of the Canaries are so evident, and their

their action so powerful, that one might dispense with more direct proofs to rebut exaggerations arising from a spirit of system-making and enthusiasm ; but these direct proofs exist to justify the results of reason and analogy. It appears, in fact, from a memoir in my possession on the produce, and commerce of the Canaries, and which was put into my hands by one of the most enlightened merchants of this archipelago :

1st, That Teneriffe, the most considerable of these islands, Palma, and Ferro, do not produce near enough for the subsistence of their thin and wretched population :

2d, That Canaria and Gomera yield barely enough to answer their demand :

3d, That Lancerotta and Fuertaventura are the granaries of the Canaries ; but that their *unrequiting and sandy soil* (these are the precise expressions of the manuscript) exacts abundant rains to make it productive ; and, moreover, that as often as their crops fail, or are but slender, dearth and famine prevail throughout the archipelago :

4th, That, even when the harvest is most abundant, the Canaries never produce a superfluity of grain for exportation ; but, on the contrary, are almost every year obliged to draw large cargoes from Spain, America, or even the north of Germany ; payment of which is made by a considerable portion of the wines of the archipelago.

The Canaries, in their present state, so far from yielding a profit to the metropolis, exact annually a large expenditure for the maintenance of their fortifications and garrisons ; while, in the hands of England, these colonies would become highly interesting : for, independent of the advantage of their position, Great Britain, by her possession of them, would be in measure released from the onerous tribute she annually pays to Portugal, Spain, and France, for the wines and brandies she extracts from them. This was, no doubt, the principal motive with the English government for its attempt on them during the last war. A numerous fleet, under the orders of Admiral Nelson, suddenly made its appearance, in 1796, before Teneriffe, the chief of these islands ; but the attack, on this occasion, had a widely different result from that made in 1657 on the same spot, by Admiral Blake : Nelson lost an arm here ; a part of his troops and vessels was taken by the Spaniards, or sunk by the artillery of the forts ; in vain, under favour of night, did he succeed in effecting a landing, and even advance to the works ; assailed on every side by the troops and militia of the Spaniards, he was obliged to capitulate, and sign an engagement to quit the archipelago. The inhabitants of the Canary Islands still shew with pride, suspended from the roof of their principal church, the colours taken from the English ; and also the boat of Nelson's ship, on board of which he lost his arm. The crews of several French ships distinguished themselves on this honourable occasion ; they hastened to take up arms on the appearance of the English ships, and contributed not a little, by their example, to rally the courage of the militia and troops of the country. The remark will not here be misplaced that, about the same time, the batteries and advanced posts of Porto Rico were defended with so much intrepidity by the French, that the English, forced to reembark with precipitation, abandoned part of their artillery.

Since the attack of Nelson, the garrisons of the Canary Islands have been greatly augmented ; when we were there, they contained 4,500 regular troops, of handsome appearance, and perfectly equipped ; the chief of these troops were at Teneriffe, which, in addition, is capable of furnishing 8000 militia. Separate from this increase of force, an attempt on Santa Cruz would at present be much more difficult than before, on account of a new fort which the late governor caused to be constructed on



a steep mountain, the batteries of which point down upon the road, and crosses the fire of the square tower which defends the mole.

The nature of our mission, the excellent understanding that subsisted between the two governments, the late successes of France, the recent peace with America, all concurred towards our meeting with the most obliging reception from the Spaniards. Our brave allies took great pleasure in interrogating us on the subject of the last campaign in Italy, on the passage of the Alps, the battle of Marengo, and that rapid succession of prodigies of which we brought them the first intelligence. All emulous, the one of the other, were desirous of testifying their respect for, and admiration of France. Yes! if the man of honour may ever be allowed to pride himself on the nation to which he belongs, then, doubtless, it must be when, under circumstances like these, replete with charms, and in the midst of foreigners, he sees the most splendid ideas of power, of grandeur, and glory, attached to the name of his country.

Among the individuals whom I had occasion myself to form an acquaintance with at Teneriffe, and whose handsome demeanour towards me is most deserving of remembrance, I have to particularize M. Le Duc de Bethancourt, colonel of the regiment of Ultonia, a descendant of that famous Jean de Bethancourt, a Norman nobleman, who was at the same time the conqueror and legislator of the Canaries. One of the greatest men of the fifteenth century, so fecund in prodigies, Jean de Bethancourt possessed all the heroism and chivalric enthusiasm of his age, without, at the same time, participating the ignorance peculiar to it, its fanaticism, or ferocity. His memory, eternally dear to the Canarians, will be, for his latest posterity, an inalienable title to the most flattering distinction; but this descendant, of whom I speak, had other, and more allowable titles to esteem.

M. Le Marquis de Nava possesses a very handsome botanic garden at Orotava; this nobleman consecrates a portion of his large revenue to naturalizing, in the islands of the archipelago, all those vegetables tending to increase their commerce, enrich the soil, embellish the vallies, and clothe their bare and sterile mountains: it is just he should be upheld to the notice and esteem of every man of worth, as one of the benefactors of his country.

At La Laguna, Mr. Savignon, physician of government, distinguishes himself in his profession by an honourable character, and extensive knowledge.

Mr. Cologant, of that respectable family in which politeness to French travellers seems to be hereditary, and the merited eulogy of which is repeated in all our national relations of modern times; Mr. Cologant, I say, took pleasure in communicating to us information of the most interesting kind, on the subject of the last eruption of the volcano of Cahorra; the coloured drawing of it, effected by himself with considerable nicety, was kindly lent to such of us as felt disposed to take a copy. Finding it, on my return to Europe, in the work of Mr. Bory, I regretted that he had not commemorated the name of its real author, as omissions of this kind, however unintentional, are oftentimes of sufficient weight to lessen, or even destroy the confidence liberally afforded by foreigners to European travellers, a confidence of which I myself have received so many generous testimonials at different epochs on our voyage.

During our stay at Teneriffe, the barometer constantly remained at  $28^{\circ} 3'$  to  $28^{\circ} 4'$ ; the thermometer on board, in the shade, and at noon, varied between  $17$  and  $20^{\circ}$ , giving for a mean  $18, 5^{\circ}$ ; a result which agrees with the experiments of Lamanon and Labillardiere, made at the same place, and under similar circumstances.

Of all the hypotheses respecting the Canaries, which owe their origin to the traditions



tions of the ancients, the most singular, certainly, and the most generally admitted is, that of the existence of a great continent, of which they formed a part, and which, under the name of Atlantis, is reputed to have occupied the ocean which now divides Africa from America. This opinion has not wanted supporters in some travellers, seduced themselves by the authority of Plato, or the sophisms of many modern writers. Volumes on this subject have been filled with compilations and citations, while the original documents still continue unproduced. Authors, instead of comparing the present physical constitution of the countries respecting which they seek to establish the ancient accounts, have bewildered themselves in dissertation and hypothesis: Mr. Bailly is, however, one who departs from the beaten track, in his manner of discussing the important question of the existence of the Atlantic continent. The interesting observations of this enlightened mineralogist are subjoined.

“Many celebrated writers,” says he, “have devoted attention, on the testimony of Plato, to the former existence of Atlantis; the majority of those who admit its existence, have considered the Canary Islands, designated by the ancients under the name of the Fortunate Islands, as remnants of this land, which, in the opinion of some, comprised no less than the space between Africa and America, and, perhaps, even formed a part of these two continents, connecting the one with the other. The chain of mountains which traverses the northern part of Africa, denominated Mount Atlas, served materially to support their system; for in the islands of which we treat, they saw the continuation of this chain, which, by a slight bend, connected the Azores; they also as readily supposed the Cape Verd Islands to be links of the mountains of the interior of Africa. The same authority indeed which thus aggregated the Canaries, the Azores, and Cape Verd Islands, might as reasonably allow the junction, to the left continent, of the other Atlantic Islands, such as Tristan d’Acunha, Ascension, St. Matthew, the Trinity, St. Helena, Noronha, &c.; for assuredly it would not have been too bold a flight to have embraced even those within the limits of a country of greater extent, according to the high-priest of Saïs, *than Asia and Lybia united*\*.

“But the grounds for conjecturing a union so singular as this, and of such distant parts, are hitherto no other than the vague traditions of the ancients; the inquirers into the fact have moreover confined themselves to the mere inspection of charts; they have neglected to compare the physical constitution of the supposed wreck of Atlantis, with the continents to which they deem it to have been united. This comparison it is which I propose to examine.

“All travellers agree in their statement, that the chains of mountains which traverse Africa and America, are essentially primitive; that the lands between them are of later origin; and that the spots, known to belong to the domain of subterraneous fires, are, compared with the remainder of these continents, few in number and of small extent.

“Different is the character of the islands sprinkled in the Atlantic Ocean; they are universally volcanic, whether single islands, such as Ascension, St. Helena, Trinity,

\* This is another error so common with French writers. Mr. Bailly clearly, by the extent he fancies to have been ascribed by the high-priest of Saïs to this disputed country, *whose inhabitants subjugated Europe, Africa, Egypt, and Asia*, reckons that, by Asia, was meant the whole of that division of the globe known to us at present under that denomination; whereas, with the Egyptians, Syrians, Greeks, and Romans, by the term Asia that country alone was designated now subject to the Turks, and known by the name of Asia Minor; neither by Lybia, as he appears by his comparison to conceive, was the division now called Africa intended, but only a very small portion, comparatively speaking, of that continent. Tr.

Madeira, &c. or in groups, the Azores for example, the Canaries, and Cape Verd Islands, Tristan d'Acunha, and those by which it is surrounded.

"These islands appear to rise from the bosom of a deep sea; their flanks are steep, and almost perpendicular; the channels by which they are separated are of fathomless depth; banks and shallows, so common in other archipelagos, have no existence here. If, occasionally, some insulated rock appears, whether it belong to some neighbouring island, or be distinct, it furnishes ground for similar observations with the larger islands. In no one of them is true granite found, any real porphyry, or primitive schistus; as for the calcareous substances which some of them present, they are no other than deposits of shells and madriporcs.

"From the simple perspective I have afforded, it, I think, evidently results, that a difference so absolute, and so general between the actual constitution of the Atlantic Islands, and that of the continent, rebuts the idea of a common origin, and even of any former junction. From these same facts it may likewise be inferred, that the hypothesis, which is obstinately persisted in, of computing the Atlantic Islands to be vestiges of an ancient continent, is incapable of defence; for these islands being universally volcanic, to support the hypothesis, either we must suppose that Atlantis was a continent altogether of volcanic nature, or, that the volcanic parts alone of this continent survived the catastrophe by which it was buried in the waves: now, both the one and the other supposition are destitute of likelihood."

### CHAP. III.—*From the Canaries to the Isle of France.*

[13th November 1800 to 15th March 1801.]

THE 13th November in the afternoon, having stowed away the provisions we came to take in at the Canaries, we weighed anchor. At four we passed by the little town of Candalaria, famous on account of the miracles of the virgin of that name. The whole of this part of the island of Teneriffe is of an aspect equally wild, and as completely barren as the coast of Anaya. In the evening we discovered the islands Gomera and Palma, which we left on the west, passing them during the night.

On the 15th we were under the tropic of Cancer; the 18th we reckoned ourselves abreast of Cape Verd Islands: from this latter point to the latitude of Gambia, we had tolerably favourable winds; but here we were so completely becalmed as to be unable to pass the equator before the 12th December, and, notwithstanding the efforts of our commander, who endeavoured to gain  $10^{\circ}$  or  $12^{\circ}$ , were obliged to cross it in  $24^{\circ} 6' W$ ; calms, currents, and baffling winds, opposing all his endeavours to cut the line more towards the east. It is, doubtless, worthy of remark, that Admiral D'Entrecasteaux, desirous nine years before of following a similar course to cross the equator in  $16$  or  $18^{\circ}$ , experienced similar obstacles, and, like us, was carried away by currents and storms as far as  $26^{\circ}$  towards the west.

On the 30th December, we crossed the tropic of Capricorn for the first time. In the night of the 23-24th January 1801, we were under the meridian of Paris, in about  $36^{\circ}$  of latitude south.

The 3d February, we doubled the Cape of Good Hope from eight to ten leagues distant. We distinguished pretty clearly the Table Mountain, notwithstanding the fog with which it was then surrounded.

The 3d and 4th March, we experienced a violent gale, which lasted about four and twenty hours, and so strongly affected the atmosphere, that the barometer sunk 10, 8 lines. The *Naturaliste* suffered some damage in her sails. We were at this time

in the Mosambique channel, famous for the frequency and violence of the storms to which it is subject. On the 10th, we again passed the tropic of Capricorn.

At length, in the afternoon of the 13th, we discerned the mountains of the Isle of France, after a voyage of a hundred and forty-five days, reckoning from our departure, the most tedious length of time ever employed in the passage. The obstinacy of our commander in persisting to keep too close to the African coast, was the principal cause of its long duration; and, as this delay was attended with the most calamitous consequences to the whole of our after operations, I consider it proper to make some comments on this head.

Two courses naturally present themselves to the navigator from Europe about to double the Cape of Good Hope: the one by steering along the coast of Africa, cutting the equator as much as possible towards the east; the other, when in the latitude of the Cape Verd Islands, by bearing westward towards the eastern coast of America, so as to divide the line in 25 or even 30° of longitude west of Paris. In this last course, when in 33° of southern latitude, north-west, and afterwards western winds are met with, by favour of which, a ship makes a rapid course eastward, to double the famous cape we speak of.

There can be no doubt, if one merely computes the length of the two courses, the former must be preferred; but the skilful sailor takes into his calculation more than the relative positions of places; he knows that the widest distance is nothing to him, provided he be constantly favoured by currents and winds; and that, on the contrary, he may be detained for weeks or even months, on the shortest trip, when these same winds and currents oppose his course, or where, what he dreads still more, his motionless ship is detained by obstinate calms.

Now, in the coasting voyage along the north-west shores of Africa, the whole of these inconveniencies are united: in fact, we are taught by experience, that the general direction of the winds prevalent in these parts is east-south-east, or even south-east, and furthermore, that the currents in this portion of the Atlantic Ocean run to the north-west; it teaches us in short that, of all the known seas, that which bathes the equatorial portion of the western coast of Africa is the most subject to calms, and those of long continuance. All the most enlightened navigators agree in the facts I give, and Captain Dampier, whose works, the fruit of long practice, are so valuable for their precision, has particularly noticed them in his *Treatise on Winds*.

By the other course, on the contrary, the currents, so opposite in that along the coast, favour the vessel bearing to the west; and the calms, so formidable off that coast, are much less frequent, and, especially, of far shorter duration in the middle of the Atlantic, whether their existence be derived from the shelter of a large continent, or whether they proceed from any other physical cause. And lastly, west winds which the navigator requires on attaining 33 or 35° south, are so constant in the latter direction, that they may safely be computed on beforehand\*.

It is not then without good reason, that the most intelligent navigators prefer the western course, although apparently much longer; and this preference is certainly of long standing, since as early as the first voyages of Schouten, we find it approved from experience. This celebrated traveller relates that, during his first voyage from Europe to India in 1658, the captain of the ship in which he sailed, a well-informed man, had a dispute with another, who commanded a different vessel belonging to the Dutch

\* We shall have occasion in another part to advert to the constancy of west winds in this part of the southern hemisphere.

company, and was his consort to Batavia. The captain of his vessel, grounding his reasons on what I have related, wished to run towards the west; the other, deceived by his eyes and inexperience, resolved on coasting the shores of Africa. Differing thus in opinion the two captains separated, each taking his own course; but the knowledge of Schouten's captain availed him so much that he arrived two months before the inexperienced coaster.

From complete acquaintance with all these circumstances, is it, that English ships bound to India are accustomed to near the coast of Brazil, so as not to cut the line more towards the east than  $28^{\circ}$ ,  $30^{\circ}$ , or even  $35^{\circ}$  west; and the ships belonging to the company follow the same plan as those fitted out by private persons.

Moreover, it is not only on doubling the Cape of Good Hope, that the currents and calms off the coast of Africa are to be apprehended; the daily voyages to Mallembo and Loango, and the coast of Angola, are frequently much prolonged by them; and experience here also teaches that, to escape them, ships must keep as far as possible from the gulf of Guinea, and consequently bear away to the west to return again, and sometimes to the south, in order to arrive at their place of destination. The same precaution should likewise be taken by those who leave Loango for the Antilles. Dampier even affirms, that on such a voyage it is necessary to bear to the west the space of  $30^{\circ}$  or  $35^{\circ}$  before the line be crossed, to ascend towards the north, and afterwards to steer north-west. This course, says he, is that pursued by the most enlightened sailors, and however long it may be in appearance, it is nevertheless the shortest in reality; for those who cut the equator too much towards the east to range along the coast of Africa, and bear away at once towards the north-west, are almost always subject to tiresome calms, and assailed by storms, which are more frequent, and far more dangerous in the vicinage of the coast of Guinea, than in the middle of the Atlantic ocean.

Lastly, Mr. De Grandprè, whose testimony is valuable, from his having long frequented these seas, Mr. De Grandprè exclaims, with just reason, against those ignorant or timid captains, who, notwithstanding the fatal experience of other navigators, continue to coast along the shores of Africa: he relates, among other examples, that of a vessel, which, detained by calms, and thwarted by currents, was eleven months on its passage from France to the coast of Angola. In one word, if it were not foreign to the nature of my work to lengthen this discussion, it would be by no means difficult for me to present so great a number of facts and observations, favourable to a western course, as to make its merit of preference demonstratively evident; for my present object it suffices that I have put it in the power of the reader to appreciate duly the extent of the fault of our chief. It will shortly be seen, indeed, that as a necessary result of this loss of time, as easy to have foreseen as prevent, he found himself obliged, at the very outside of his voyage, to invert the whole order of operations. Such are the vexations and irreparable consequences which, in the execution of great undertakings, may result from the most trivial faults!

The narrative of a voyage to India, it should seem, after the numerous voyages of all nations to that part, during more than three centuries, must be unsusceptible of exciting any interest unproductive of any new observation; nevertheless, that this is not the case will appear from a cursory glance over the multitude of relations furnished at different epochs. In these, nearly all the navigators will be found to have been occupied with the most common objects, mere echoes of what had a hundred times before been

\* Dampier also recommends to pass the line between  $30^{\circ}$  and  $35^{\circ}$  west.

told by their predecessors, and neglecting all the real novelty to be found in this immense field, comprehending at once the whole length of the Atlantic Ocean, the Indian Sea, the two temperate zones, and the equatorial belt of the world. Yet, what a valuable succession of observations might there not, in such a voyage, be made on the atmosphere, and its temperature in different latitudes of the one and other hemisphere, on the variations of the barometer and hygrometer under similar circumstances! On the temperature of the sea also, at its surface, compared with that of the atmosphere at different parts of the day and the night! And the warmth of the sea, at great depths, does it not present a career fecund in results of greatest interest? Are we not moreover reduced to vain conjectures on the depth of the sea, and the relative proportion of the saltness of its waters? Our opinions are they not still irresolute respecting the real cause of the phosphorescence of the sea, of this marvellous phenomenon, so common, yet so ill explained, and, it might be said, so ill examined till the present day? And casting the eye over the wide expanse of the ocean, are there not a crowd of pelagic animals, of molluscs, and zoophytes especially, which might be discovered, and only wait, to exhibit new prodigies, a search into their organization, an historian of their mode of life?

Here, certainly, are subjects for observation, numerous enough and sufficiently attractive; to be pursued during the long voyage in question; subjects, on which attention would far better be fixed than on flying-fishes, dorados, sharks, and their pilots\*, &c. To voyages of such description, and to these alone, does it belong to furnish the precious materials of a physical and meteorological chart of the sea, a chart of which science deplors the want, and the most simple elements of which it would seek in vain in heaps of narratives, mere repetitions the one of the other.

In directing my attention to the several subjects I have detailed, I was desirous rather of pointing out this new career, than of boasting on account of my having pursued it; but the results I have obtained from these first attempts appear to me of sufficient utility to claim a summary exposition in this work; the minutiae of the observations of which these are the fruits I reserve for other occasions, and for other works.

### SECTION I. — *Meteorological Observations.*

THESE observations were made with the thermometers of Dollond and Mossy, the barometers of the latter artist, and the hygrometers, with double hairs, of Richer. That the observations might better be compared, I made a point of repeating them four times every day at the most opposite hours, that is to say, at six, night and morning, at noon and midnight. The observations were commenced with the voyage, were made in the open air in all weathers, and on the quarter deck. The first series of my labours furnished me with the following general results.

#### *Indications of the Thermometer.*

1. The temperature, under similar circumstances of weather, rises progressively with an advance towards the equator.
2. It progressively falls in sailing from it.
3. The proportion of its rise and fall is not the same in either hemisphere; the mean of the heat in the southern being less than in the corresponding northern latitudes.

\* The remora is called the pilot-fish, from its constantly preceding the shark, and pointing out to it its prey. TR.

4. Under similar circumstances, the temperature of the atmosphere between the tropics is less in the open sea than in the interior of continents, or even in islands: the greatest heat experienced under the line did not exceed  $25^{\circ}$ , and the mean heat was much inferior.

5. The variations of temperature are smaller, and less frequent, in proportion as the equator is nearer approached, and the contrary.

6. Not only are the variations of temperature less considerable from one day, or even one month, to another, between the tropics and in the open sea; but, in ordinary weather, the difference between the temperature of the day, taken in the shade at noon, and that of the night, taken at midnight, is inconsiderable; for, of forty observations made between the 22d of November and 1st December 1800, and which furnished me with a total of  $909,6^{\circ}$  of heat, those made at noon gave  $233^{\circ}$ , and those at midnight  $222,7^{\circ}$ , which makes a difference for each day of scarcely one degree; a phenomenon the more remarkable, as from the experiments of Miller, Bèze, Pison, Halley, Lister, &c. it is known that the difference of the heat of the day and the night is greater in equatorial regions on shore, of which we shall have occasion to notice many examples witnessed by ourselves.

#### *Indications of the Hygrometer.*

N. B. As this is the first time that this valuable instrument was employed at sea, it was before-hand evident, that observations made with it would yield very important results. Whether these expectations were founded on reason will be seen.

7. Under similar circumstances, the hydrometer indicates an increase of humidity in proportion to the advance towards the equator.

8. The positive humidity of the atmosphere appears to lessen in proportion to the increased elevation of the pole.

9. The variations of the hygrometer are more rare and feeble the nearer it is to the equator, and the contrary.

10. The hygrometer, in the center of the equatorial regions, at most, constantly maintains the point of complete saturation.

#### *Indications of the Barometer.*

11. Circumstances alike, the barometer sinks in proportion to the advance towards the equator.

12. It rises progressively in receding from it.

13. The variations of the barometer are more slight and less common, under similar circumstances, in proportion to its proximity to the equator, and the reverse.

14. The uniform level of the theatre of our observations, the distance or absence of any foreign cause to disturb the atmosphere at sea, renders the progression of the barometer much more regular, and its variations more subject to comparison than could possibly be the case on large continents: on this account the instrument is of great utility to mariners, of which our own experiments leave not the slightest doubt.

#### *Relation of the Barometer and Hygrometer.*

15. The variations of the barometer have an indisputable affinity to those of the hygrometer.

16. The fall of the mercury corresponds, in the greatest number of instances, with the increase of humidity; and the greater this becomes, the more is that perceptible.

17. The elevation of the barometer almost always corresponds with the decrease of humidity in the atmosphere; circumstances being the same, it is greater in proportion to the diminution of moisture indicated by the hygrometer.

*Winds.*

18. The winds decrease in force and are more constant in proportion to the proximity of the equatorial regions, and the contrary.

*Relation of the Winds to the Barometer.*

19. The winds appear to have influence, really, and independently of other circumstances, on the variations of the barometer; for I have frequently seen the mercury sink suddenly three, four, five, six, and even eight lines during the prevalence of dry and cold winds, notwithstanding the rapid decrease of moisture in the atmosphere; a circumstance, which, according to the too general theory of Deluc, should, on the contrary, have occasioned the mercury to ascend.

20. This action of the winds on the barometer, under similar circumstances, appeared to me to be generally in proportion to their frigidity and velocity combined.

*Atmospherical Phenomena.*

21. The misty state of the sky observed towards noon in all the equatorial regions, and designated by navigators, a *gray sky*, a *thick horizon*, a *gauzy sky*, or a *misty horizon*; the splendid pomp of sun-rise and sun-set in the same climates, and the serenity of the heavens during the night, which presents so remarkable a contrast to the misty state of the atmosphere during the day; the frequency, and the almost instantaneous formation of those menacing clouds described by so many travellers, of those storms known by the name of bull's eyes; the astonishing permeability of moisture, from which it is next to impossible to preserve the most valuable objects; the profusion of rain, and the large size of the drops that fall — all these phenomena of equatorial meteorology, unexplained before, appear to me to depend almost exclusively on the moist state of the atmosphere in these parts; and the theory of atmospherical refraction, in my opinion, is allied in an important manner to observations of this description.

*General Results.*

22. If to these results of our enquiries those obtained by Mr. Humboldt on the decrease of the intensity of the magnetic power towards the equator be joined, it follows, that all these grand phenomena of physics experience most important modifications in proportion to the proximity of this line: on advancing towards it the force of gravitation and the intensity of the magnetic force diminish, the barometer sinks, the thermometer rises, the hygrometer advances towards saturation, the winds are less strong and more constant, and the progression of all the instruments becomes more regular, while their variations diminish.

SECT. II. — *Temperature of the Sea.*

UNDER similar circumstances, and at the times of making my meteorological observations, I followed up a long series of researches on the relation of the temperature of the sea with that of the atmosphere; the result I have detailed to the Institute.

With an apparatus constructed after a plan of my own, I attempted at the same epoch, in concert with my colleague and my friend Depuch, some observations on the temperature of the ocean at great depths; and from them I was led to suspect a progressive coolness of the water of the sea proportionate to the distance from the surface. I shall, on a future occasion, have to return to this curious part of our labours.



### SECT. III. — *Saltnefs of the Water of the Sea.*

IN the number of the most important observations requisite for the physical history of the sea, those certainly must be placed which have for their object to determine the positive and relative proportion of saltnefs in its water, under different latitudes, and at different depths. Hitherto, however, experiments of this description are few, and even these first essays seem to me altogether wanting of exactnefs in their principles, and consequently to be useless in their results. In fact, specific gravity, taken as a base for works of this kind by Ingen-houfs, Labillardiere, and M. Humboldt, in my contemplation, is a means incapable of affording any precise conclusions, on account of the enormous quantity of corpuscles, oftentimes visible by the microscope, which abound in salt water, and which, possibly foreign to the matter of the salt itself, cannot fail to affect the specific gravity of the liquid in which they float, and are, one may say, dissolved, on account of the gelatinous mucus which transudes from the whole of their exteriors, and gives to the purest sea-water the viscous character by which it is particularized.

The mode adopted by Sparman, of collecting sea-water and preserving it afterwards in bottles, is even more exceptionable; the putrefaction to which the water is subject never failing of changing all its constituent parts, and producing others, by the spontaneous decomposition of the numberless animalculæ we have noticed.

To obviate these different inconveniencies, at every five degrees of latitude, I proposed to collect a pretty large quantity of sea-water, say 100lbs., to filter it through brown paper, and to determine afterwards its specific gravity by means of the areometer of Nichollson, a means of itself essentially defective, as will appear from what has before been said, but which, being only accessory here, was of utility, as the water by filtration would previously be separated from the major part of the heterogeneous substances. This first operation finished, I intended to distill the filtered water in one of the alembics, furnished us by government, and continue the evaporation of it till I had concentrated as much as possible all the saline substances in solution. Uniting afterwards the residuum of these distillations in one or more bottles, securely closed with emery, I proposed, on my return, to confide this succession of valuable specimens to M. Fourcroy, who, no doubt, would not have failed to give exact analyses of them. This plan, independent of the precise results of which it seems susceptible, held out the double advantage of exacting only a series of operations, very easy, even on board of ship, and of rendering needless all the minutiae of a delicate analysis, which could not be pursued with sufficient nicety in the midst of the embarrassments incident on a sea voyage. — Unfortunately in this, as in many other instances, I was obliged to give way to the spirit of contradiction in our chief; and I should have abstained from speaking here of this my plan of experiments, had it not appeared to me necessary to call the attention of students of physics, and travellers, to this curious part of the history of the sea, and to point out to the latter a process, as easy of practice, as exact in its result.

### SECT. IV. — *Phosphorescence of the Sea.*

UNDER relations, certainly not less singular, the ocean again was the object of my researches. The phosphorescence of its water, from the time of Aristotle and Pliny, has been an object of interest and meditation, as well for travellers as the lovers of physics. How numerous and varied indeed are the phenomena it presents! \* Here the

\* However brilliant the rapid account I give of the principal phenomena of phosphorescence may at first sight appear, yet is there not a word, not an epithet indeed, but is borrowed from the observations of men the most

the surface of the ocean sparkles, and shines throughout its whole extent like a silver stuff electrified in the dark; there the waves roll out in immense sheets of sulphur and bitumen in flames; in other parts again the sea resembles a vast ocean of milk, the limits of which are lost in the horizon. Bernardin de St. Pierre has described, with enthusiasm, the brilliant stars which by myriads spring from the bottom of the sea, and of which he observes with truth, our fireworks are but a feeble imitation. Others speak of those masses, in guise of fire, which roll over the waves like so many red-hot balls, and of this description we ourselves saw one apparently not less than 20 feet in diameter. Many sailors have noticed incandescent parallelograms, cones of light revolving round their own axes, splendid garlands, and serpentine illuminations. In some parts of the sea columns of fire, eliciting sparks, are thrown up from the bosom of the deep: in others, clouds of light and phosphorus are seen traversing the waves in the midst of darkness. Occasionally the ocean appears decorated with an immense scarf of moveable and wavy light, the ends of which exceed the limits of sight. All these phenomena, and many other which I abstain from indicating here, however marvellous they may appear, are not the less incontestable; they have been described by travellers of undisputed veracity, and I myself have observed the major part of them in different quarters of the sea.

How numerous the theories which successively have been published to explain these kinds of prodigies! Now the spirit of salt, bitumen, petroleum, and animal oil, have been held forth as the elements of these varied phenomena; the spawn of fish now, of molluscæ and the remains of sea animals; and now again, the gelatinous mucus which transudes from fish continually, from zoophytes, molluscæ, &c.; some naturalists have ascribed it to a species of movement of putrefaction in the superficial beds of the ocean; many have called light to their assistance for expounding the mystery; and while some imagine it acting in combination, others consider it as exclusively reflected. Electricity could but act a principal part in this quality of the sea with many, and numbers of celebrated characters have attributed the phosphorescence to its agency. More recently still, phosphorus, and its divers combinations, have opened a new field for hypothesis; some have supposed it in these phenomena to be in a pure state, and others combined with hydrogen.—In short, there are no kinds of explanation, likely, or absurd, which have been omitted; and, nevertheless, the opinion of strict naturalists continues yet uncertain as to the real cause of this grand phenomenon of nature.

In the physical and meteorological part of my works, I shall have occasion to examine more particularly these different theories, and shall, I trust, be able to shew how much, one of them excepted, they are inadequate to the solution of the different data of the problem; here I shall merely publish some of the results of my experiments and long researches into the subject.

1. Phosphorescence essentially pertains to all seas; it is alike observable in the middle of the equatorial regions, in the seas of Norway, and Siberia, and in those of antarctic pole.

most precise, and least susceptible of enthusiasm or exaggeration. It will be sufficient I should specify the names of Cook, La Perouse, Labillardiere, Vancouver, Banks, Sparrmann, Solander, Lamanon, Dapies de la Manneville, Le Gentil, Adamson, Fleuriu, Marchand, Stavorinus, Spallanzani, Bourzeis, Linnaeus, Pison, Hunter, Byron, Beal, Adler, Rathgeb, Martens, De Gennes, Hierne, Dagelet, Diequenmarre, Bacon, Lefarlot, Lessingius, Shaw, Sloane, Tachard, Dembey, Ozanam, Barter, Tarnström, Marfigli, Kalm, Nassau, Pontoppidan, Morogue, Phipps, Poutrincourt, Heitman, Kirchmayer, Anson, Frezier, Le Maire, Vannei, Rhumpe, Rogers, Drake, &c.

2. Circumstances alike, phosphorescence is generally more powerfully exhibited and more constant between the tropics, or near to them, than in latitudes more towards the poles.

3. The constantly warmer temperature of the equinoctial seas appears to be the mediate cause of this difference.

4. Under similar circumstances, phosphorescence exists on a grander scale and more constantly along coasts, in narrow seas and straits, than in wide extending seas and at distance from land.

5. Commonly this phenomenon is apparent in proportion to the roughness of the sea, and the darkness of the night.

6. It is however perceptible even in the calmest weather, and the brightest moonlight.

7. All the phenomena of the phosphorescence of sea water, however multiplied and singular, are ascribable to one cause, the luminousness attached to sea animals, and most especially to molluscæ, and other soft zoophytes. My numerous experiments, and the beautiful series of phosphorescent animals executed by M. Lefueur, will I trust empower me to remove all rational doubt of this important truth.

8. The active phosphorescence inherent in animals, different in every respect from the weak light, which in certain instances emanates from putrid decomposition, is so completely dependent on the organization and life of these animals, that it increases with their growth, diminishes with their decay, becomes extinct with their life, and after death is incapable of reproduction.

#### SECT. V. — *Observations pertaining to Natural History.*

HOWEVER varied my observations on physics and meteorology, they did not absorb all my time; so much may there be bestowed to study on board of ship, where, far from the busy hum of cities, man finds himself so completely removed from all family duties, or the courtesies of friendship, from all relations in short of society. The study of molluscæ, or pelagic zoophytes, in particular, employed all my leisure moments: it had been most especially recommended to me by M. Cuvier, who may, if the expression is allowed, be looked upon as the creator of this important class of the animal kingdom, and whose counsels and instructions served to regulate my enquiries. My colleague Maugè, my friend Lefueur, worked with me in concert, and we had the grateful satisfaction to make, in this study, discoveries equally numerous and interesting; but the detail of these being incongruous to our narrative, it will suffice I present, in a rapid sketch, a picture of some of these animals, too long neglected by naturalists, and which, by the singularity of their form, their extraordinary organization, the beauty of their hues, and the variety of their habitudes, so richly merit the attention of the enlightened part of the community.

At the head of these animals presents itself the *Physale*, a species of zoophytes which, by means of a membranous bladder, much resembling that of certain fish, always floats on the surface of the sea; a sort of muscular and membranous ridge, which rises longitudinally in folds from the upper part of the inflated vesicle, furnishes the animal with a real sail, the dimensions of which it can vary at pleasure, to suit the force and direction of the wind; to this singularity, no doubt, are attributable the names by which it is distinguished, of *frigatë*, *gaalette*, *galley*, &c. names given it by sailors of all nations: a treacherous animal, it extends over the surface of the water numerous feelers, several feet in length, of an ultramarine blue colour extremely lively and bright. Woe to the hand

hand that ventures to lay hold on them; the sensation of a burn is not more sudden than that of the hidden poison of these instruments of prey. An insupportable pain in the part touched by them, and a complete numbness in the corresponding limb, are the almost instantaneous effects of the slightest contact. Sometimes little white blisters are raised on the skin, similar to those occasioned by stinging nettles, causing a very poignant smart, which generally lasts from twenty-four to six-and-thirty hours. What is the nature of this subtle poison? No positive experiment has hitherto been made of it; all that I can say myself from trial is, that on immersing this animal in water strongly impregnated with any acid whatever, and especially sulphuric or muriatic acid, the beautiful blue colour of its feelers immediately became red, as if the element of their colour was of a vegetable nature. I must add, this fish seems to possess a specially stupefying power over the animals on which it feeds; for, otherwise, it would be impossible to conceive how an animal so weak as the physale can retain in its nets, and in a manner devour alive, fishes four or five inches in length, as we had frequent opportunities of observing. For this last purpose, the galley employs a prodigious number of suckers, which depend from the lower part of the airy vesicle, and which are surrounded by the poisonous feelers I have described.

Next to the physales in interest are the Physiphores; soft, gelatinous animals of the most beautiful colours; their bodies are supported on the waves by means of a vesicle, of the shape of a very small olive, and with a very thick coat, the interior of which is filled with air. Is the animal solicitous of plunging into the deep, a valve falls, the air by which the bladder is inflated escapes, the specific gravity of the animal increases, and it sinks. Does it wish to re-ascend, a new bubble of air seems to be developed, or rather instantaneously created, the little reservoir again extends its sides, the valve closes, and the physiphore, now rendered buoyant, rises to the surface of the sea.

The Vetelles obtain the same end from different means; on the back of the animal, which presents the figure of a small wherry with its bottom upwards, a sort of crest or ridge, extremely thin, light, transparent, and cartilaginous, rises in an oblique manner; this is a large sail which serves the vetelle to direct its movements, and to vary and increase their velocity: always keeping close to the wind, this elegant azure boat advances in order, tacks with rapidity, and changes its course according to its pleasure or need, and rarely fails of attaining the prey it pursues: this overtaken, it enfolds it within its numerous feelers, disposed round the boat, and devours it by means of the multiplex suckers which hang from its lower exterior. The elegance of the form of this animal, the transparency of its sail, the beautiful mantle of blue with which it is clad, all concur to render it one of the most pleasing species of the family to which it belongs; indeed, nothing can afford a more charming picture than these animals, when, in calm weather, they manœuvre by thousands on the surface of the sea, and resemble so many gay flotillas, directed by the same principles employed in naval tactics by man.

In the Beroes nature seems to have exhausted herself to produce the utmost grace and brilliancy in the elegance of its figure, the richness of its hues, and the variety of its movements. The substance of them, superior in pellucidity to the clearest crystal, is generally of a beautiful rose-colour, that of the opal; or azure; their form is more or less spheroidic: eight or ten longitudinal ribs are disposed around it, each formed of a prodigious number of small transversal leaves, extremely thin, and of astonishing mobility: these constitute the essential organs of motion of the animal. By the help of these myriads of little paddles, worked at pleasure, this animal directs its course at will towards its prey, to avoid an enemy, or in circular revolution about its own axis; by these,

these, in short, it effects whatever manœuvre it needs. What is still more admirable in the heroes, light being decomposed by the effect of its movements, equally rapid as various, its longitudinal ribs become as many living prisms, and envelope the animal like eight or ten rainbows, so animated, and so undulating, that language or the pencil must in vain attempt to describe their beauty.

What shall I say now of that other species of zoophytes, which, similar to a beautiful wreath of crystal of an azure hue, swims on the surface of the waves, and lifts above them in succession its diaphanous leaflets, in figure resembling those of ivy ! Its beautiful rosy feelers extend to a distance in search of its prey ; it touches it, and instantly it is caught in the fatal net. The animal then contracts itself so as to form a kind of circle round the food it has seized. Myriads of suckers, comparable to long leaches, dart at the same instant from the leaflets I have noticed, and which, in a state of rest, serve to cover and protect them. Passed but a few seconds, and the most bulky prey is no longer to be seen. Shall I dwell on the admirable phosphorescent property common to the majority of animals of this class, but which in this manifests itself in a more than usually lively and splendid degree, and which in the midst of darkness gives it the similitude of a garland of fire and light ?

What shall I say also of those Tenthines, of a purple colour, which make their way over the surface of the waves suspended by a white bunch of airy bladders ? Of those numerous legions of Salpa, of a rosy, azure, or an opal colour, which form floats of thirty or forty leagues in extent, and shine with splendour in the dark ? Of those Medusæ, equally phosphorescent, which present so many singular forms in their organization, so many delicate shades of colour ? Of those Pyrosomes shaped like an enormous finger of a glove, which exhibit no apparent loco-motive organ, no organ of digestion, or of reproduction even, but which cover the sea with their innumerable hosts. The substance of these animals is brilliant in such a degree, during the prevalence of darkness, as to assimilate with molten iron ! Shall I here describe those charming Glauci, of an ultramarine blue, with a silver band on the back, which resemble so many pelagic lizards ? Their gills (branchiæ) ramified like handsome shrubs, serve them at once to swim with and for lungs. Shall I recall to mind those Pneumodermes which the celebrated M. Cuvier, to whom I sent several specimens, conceives should constitute a new order\* in the class to which they belong, and which have the organ of respiration on the posterior part of the back ? Shall I speak of those Hyales, whose cantonments are the vicinage of the Cape of Good Hope, and which, protected only by a shell, extremely thin, fragile, light, diaphanous, and horny, yet delight in the stormy waves of the Southern Ocean ? One is tempted to take these beautiful molluscæ, on seeing them display their purple fins, for so many turtles in miniature ; and, in fact, it is by that name they are designated by sailors.

Shall I dwell on the discovery of the living Spirula, which at length resolves the great problem of the mode of formation of those singular shells with several cells, which, under the names of Nummulites, Belemnites, horns of Ammon, Hippurites, lenticular stones, Turritiles, &c. are of such note in the history of the revolutions of our planet, of which so small a number of species should seem to have escaped the great catastrophes of nature, and the living animals pertaining to which were hitherto unknown to naturalists ?

Shall I describe those azure Porpites, in the membranous shell of which the learned M. Cuvier finds a recognition of the type of some species of nummulites with concen-







tric spirals, and in a state of petrification on the summits of the loftiest mountains of our continent.

But I must stop here; for the mere indication of the new and interesting objects, that I and my friends collected in our long voyage from Europe to India, would occasion me to exceed the natural limits of this chapter: it will be sufficient to add that more than eighty species of new animals were on this occasion the fruits of our diligence; that many of these animals form new genera, or even new orders; that among these genera there is a fish, remarkable not only for its colours, lustrous with gold and purple, but still more for the pustulous conic vesicles with which its integuments are bristled, and which oblige it to float constantly on the surface of the sea.

#### CHAP. IV. — *Stay at the Isle of France.*

[15th March to 25th April 1801.]

*General Aspect of the Island.*] AFTER a long voyage, the sight of any land is, doubtless, pleasing to the navigator; but how much the more pleasing, when it is that where he shall meet with men, with the manners and language of his native country! But, in addition, the picturesque appearance of the Isle of France, the extraordinary form of its mountains, the verdure with which its surface then was clothed, the multiplicity of dwellings and plantations discovered in the distance,—all contributed to give a new charm to the delight we experienced on attaining this first term of our voyage.

*Name, Position, Dimensions.*] The Isle of France, first discovered by the Portuguese, who called it Cerne, afterwards occupied by the Dutch under the name of the Island of Mauritius, and now by the French, who changed this last denomination for that it bears at present; the Isle of France, I say, is a small island of the Indian Ocean, commonly included in the division of Africa; situate within the tropics, at only three degrees from that of Capricorn; it is of an irregular oval form; at its greatest length it measures scarcely eleven leagues; the breadth is barely eight; the circumference is estimated to be 45, and its surface, according to the Abbe de la Caille, is 432,680 toises: it is 30 leagues north-east of the Isle of Reunion†, the soil of which, like its own, is entirely‡ volcanic; but its mountains are much more elevated§, and it still possesses a burning volcano.

\* This is an error: for toises should be read arpens communs. M. de la Caille surveyed the island geometrically in 1753; his results are given below reduced to English measure.

Length from north to south	—	—	67,970 yards or	38 miles 5 furlongs.
Breadth from east to west	—	—	47,157 —	26 — 6 —
Circumference	—	—	193,258 —	109 — 6 —
Area	—	—	424,137	British statute acres.

If the (and banks to the north-east be included, the figure of the island is the frustrum of a cone, the nearly even base of which running from north-east-by-north to south-west-by-west, measures 40½ English miles; from the base to the opposite shore the breadth is 25 English miles. • TR. (From Memoires de l'Academie des Sciences, annee 1754, p. 118.)

† The Isle of France is 30 leagues distant north-east-by-east from the Isle of Reunion, now again called the Isle of Bourbon. This with the Isle of France are now subject to the British crown. TR.

‡ M. de la Caille, in the Mem. de l'Acad. Françoise contradicts this from minute examination of the island, and gives no demonstration that its low parts are an aggregation of pulverized madripores, coral, and vegetable earth. TR.

§ The most lofty mountain of the Isle of France, Morne Brabant, is but 424 toises in height, while the Salafles of the Island of Bourbon are reckoned of an elevation of from 14 to 1600 toises.

*Winds, Hurricanes.*] The predominant winds in the Isle of France are those from the east-south-east, the south-east, and south-south-east, the most salutary and grateful that can blow in these parts. Those from the north and the west, and especially from the north-west, bring rain with them, and almost constantly accompany the hurricanes that lay waste the colony at intervals; but which hurricanes are said to be far more rare than formerly since the land has been cleared extensively of trees. Among the most famous hurricanes of modern years those are cited of 1786 and 1789. The first took place on the 15th of December 1786; the sea on this occasion rose three feet eight inches above the height of the highest tides; the barometer sunk 12,3 lines, within the space of four-and-twenty hours; there fell 73 lines of rain, independent of thunder and lightning, which were nearly incessant throughout the whole of this terrible storm; a meteor was remarked, resembling a globe of fire, following the direction of the wind, then from the north-west, and disappeared behind the mountains of Moka. This meteor was considerably elevated in the atmosphere, and seemed nearly half the size of the moon.

The second hurricane, still more disastrous than this, took place on the same day and month, that is to say, the 15th December 1789: its duration was about twenty-three hours, during which the barometer sunk 14,9 lines; the mercury was so much agitated in the tube that its oscillations extended through the space of two lines. Flashes of a pale light were evolved from its surface that filled the whole vacuum of the tube. The sea presented a horrid appearance, and the waves dashed with such impetuosity that many vessels were thrown upon the rocks, and some even foundered at their moorings in the port. The districts of Moka, Flak, the Pamplémousses, and La Rivière du Rempart, were, in particular, terribly ravaged by the hurricane, during which there fell 104 lines of rain.

Notwithstanding this momentary ruin, the consequence of hurricanes, experience seems to prove them of real benefit to the country, by the soil acquiring new vigour from their periodical return, and by the atmosphere being rendered more salubrious by them: thus Nature, even in her wanderings, displays her liberality, and renders evil itself an instrument of benefaction!

*Earthquakes.*] Earthquakes are extremely unfrequent in the Isle of France; they still are not wholly unknown. In the morning of the 4th August 1786, two pretty strong shocks were experienced, which however were productive of no injury.

*Thunder.*] Thunder, without being frequent, is yet not uncommon; as in our climates, it is rarely heard except in the hotter months, that is to say, October, November, December, and January. The mean of nine years' observations gives fifteen days in each year for its occurrence.

*Hail.*] Hail is a phenomenon extraordinary in the island, but of which some examples are cited: on the 10th December 1799 some fell in the plains of Moka.

*Rain.*] Rains are generally very frequent, and exceedingly copious. At the north-west port the number of rainy days are annually from 105 to 140; they are still more numerous in the plains of Moka; in the year 7 (1798) they amounted to 198; in the year 8 (1799) to 193; which, in either case gives more than half the days of the year as rainy days.

*Rivers.*] This frequency of rain, the height of the mountains, the forests which crown their summits, and the basaltic nature of the soil, which prevents any deep penetration of the water, must be considered the principal causes of the multiplicity of rivers, which, independent of rivulets, sources, and torrents without number, exceed

exceed forty, all of them inconsiderable indeed, but which, nevertheless, collectively discharge a very great portion of water. This plentifulness of rivers and rivulets powerfully contributes to a fertility of soil, a strength of vegetation, of which in our climates, less favoured by nature, we scarcely can form an idea.

However abundant the rains in the Isle of France, still is it an opinion generally received in the country that they have much decreased within the last five-and-twenty or thirty years; and every body attributes it to the extensive clearing of the land by felling the woods, a process which, of late years especially, has been pursued with too much indiscretion. This opinion is general with all the planters, as well those of old standing as new settlers. All of them affirm that the rivers bring with them visibly a much smaller volume of water than formerly; that many springs are dried up, and that vegetation ceases to be equally active; this last effect they attribute, also, less to the exhaustion of the soil, than the absence of the accustomed moisture. Assuredly it is far from impossible that the indiscreet felling of the forests may have much tended to diminish the quantity of rain; but it is also very possible that the present quantity, continuing the same, may be more than sufficient for the demands of vegetation; for the first consequence of rendering bare the soil, is a more prompt and especially a more considerable evaporation; but whatever may be the value of this last remark, it is not less incontestible that the felling of trees has in almost every quarter of the island been prosecuted with a blameable excess. Already, even, wood is scarce in the vicinage of the north-west port; and M. Cerè assures me that, in his youth, the whole plain of the Pamplémousses was covered with forests. They have been replaced by plantations and dwellings\*.

*Temperature.*] The temperature of the Isle of France is not by much so great as might be presumed from its latitude. In fact, from a series of daily observations, made with great nicety for three successive years at the plantation of Minissy, belonging to one of the brothers Monneron, (a name not held in less esteem in India than in Europe,) I find that the maximum of heat in the year 7 was scarcely  $22^{\circ}$ ; in the year 8,  $21,8^{\circ}$ ; and in the year 9,  $22^{\circ}$ : the minimum in each of these years was from  $13^{\circ}$  to  $14^{\circ}$ . Most commonly the heat is in summer from  $18^{\circ}$  to  $20^{\circ}$ ; in winter, from  $15^{\circ}$  to  $18^{\circ}$ . Hence, in all this part of the island, it is the custom to have fires in winter†; the nights in particular are very cool, and I myself have sensibly experienced the necessity of being well covered at that season.

In the plain of the Pamplémousses, the temperature is not greater than in those of Wilhems and Moka. M. Cerè, who diligently remarked the thermometer through a space of thirty years, assured me that that instrument very rarely rises higher than  $25^{\circ}$ ; that such a phenomenon scarcely happens once in five years; that still more seldom it attains  $26^{\circ}$ ‡; and that, in this last case, the circumstance is almost constantly followed by violent tempests or hurricanes. Exposed on many occasions from noon till one o'clock to the action of the sun, his thermometer never rose higher than  $40^{\circ}$  §.

\* The great Frederic ordered a forest to be cleared: "Sire," said a courtier, "if Your Majesty continues after this manner, you will render wood scarce."—"But the woods will be replaced by fields, which employ more hands," was the Monarch's reply, "and feed more mouths; and I would rather have men for subjects than trees." Tr.

†  $41^{\circ}$  of Reaumur is equal to  $57\frac{1}{2}^{\circ}$  of Fahrenheit;  $15^{\circ}$  of R. to  $59^{\circ}$  of F.;  $18^{\circ}$  of R. to  $64\frac{1}{2}^{\circ}$  of F.;  $20^{\circ}$  of R. to  $68^{\circ}$  of F.; and  $22^{\circ}$  of R. to  $71\frac{1}{2}^{\circ}$  of F. I presume from the assimilation of these data to others given in the Mem. de l'Acad. Française, that the thermometer of Reaumur is that alluded to by M. Peron. Tr.

‡  $78\frac{4}{5}^{\circ}$  of Fahrenheit.

§,  $104^{\circ}$  of Fahrenheit.

This remarkable peculiarity of moderate temperature in the interior of the Ile of France is consequent, 1st, on the small extent of the island; 2d, on its insular position in midst of the sea; 3d, on the nature of the predominant winds; 4th, on the existence of mountains of tolerable elevation, which cover a portion of its surface; 5th, on the forests, which are yet extensive in the interior of the island; 6th, on the frequency and abundance of rain; and 7th, on the multiplicity of rivers and springs, which maintain a perpetual coolness in the inferior strata of the atmosphere.

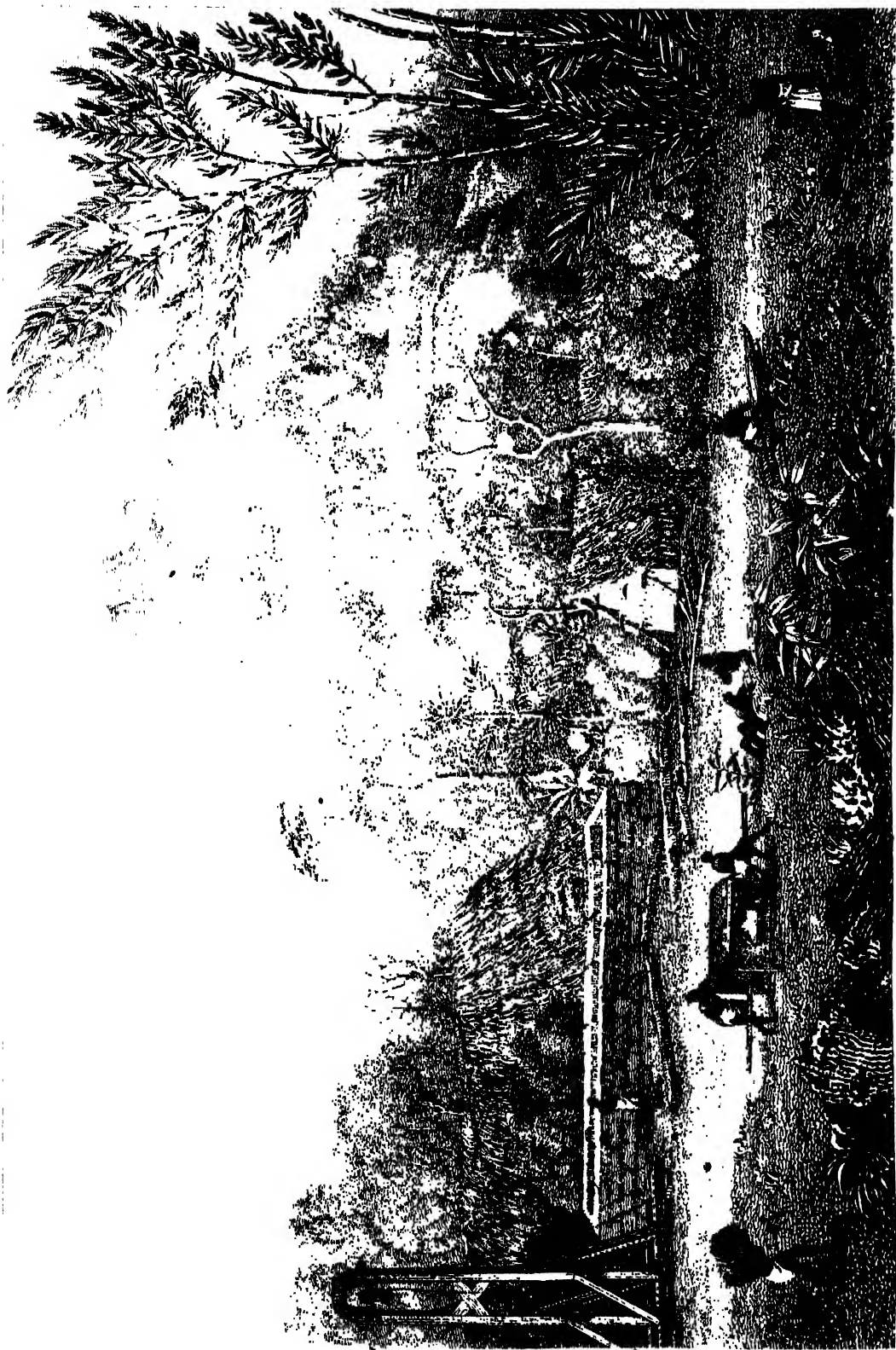
At the north-west port the temperature is much higher than in the rest of the island: from a long series of observations made by M. Lisset, a former correspondent of the Academy of Sciences, the maximum of heat experienced at the town of the port is annually,  $28^{\circ}$  \*,  $29^{\circ}$  †, and even  $29,5^{\circ}$  ‡. The thermometer, nevertheless, was never remarked by M. Lisset to rise to  $30^{\circ}$  §. The months of December, January, and February are the hottest. It is not only on account of its higher temperature that the atmosphere of the north-west port is incommodious and fatiguing; its perfect stagnation, so frequent at this place, renders it still more so. This, as well as the superior heat experienced there, is owing to its position in a deep bottom, surrounded on all sides by the mountains La Decouverte, Le Pover, Pieter-bôt, and Long Mountain; a position which deprives it of the immediate action of those cooling and salutary breezes from the south-east and south-south-east, of which I have before spoken.

*Barometer.*] Except on occasions of hurricanes, the barometer maintains itself in the north-west port between 27 inches 9 lines and 28 inches 3 or 4 lines; but in the more elevated plains of Moka this instrument very rarely exceeds, and is almost constantly lower than 27 inches.

*Salubrity.*] These remarks on the physical state of the Ile of France are not only important in a meteorological view, but as they refer to the health of the inhabitants. For it cannot be difficult to apprehend from the observations I have adduced, that the more active, cool, and lighter air of Moka, the plain of Wilhems, &c. agrees much better with weak constitutions and convalescents than the stifled atmosphere of the north-west port; or that, on the same account, the lively air of the plain of Wilhems is prejudicial to persons of weak and delicate lungs: now experience, in both these cases, confirms the deductions of reason and analogy. Notwithstanding this inconvenience, complaint would be unjust, as it is to these same qualities of the air that the Ile of France is indebted for its justly merited reputation of salubrity, and the absence of those dreadful fevers common to Batavia, the Philippines, Moluccas, Madagascar, and the major part of the equatorial countries.

*Endemial Maladies.*] We must not, however, with some enthusiasts, imagine the Ile of France exempt from every endemial malady; unfortunately it is subject to many, the more formidable from the difficulty of their being avoided. Indeed, not to mention complaints in the chest, which are very common, and of the leprosy, which, anciently unknown in this island, at this time reckons a number of victims, even among the white population: every kind of affection of the urinary passage is known here in an extraordinary number of instances, disorders that seem especially to depend on the quality of the waters, which, from the chemical analyses of M. Delisle, appear to hold in solution a great proportion of calcareous carbonate.

*Geological picture of the Soil.*] I have now given from my individual observations,

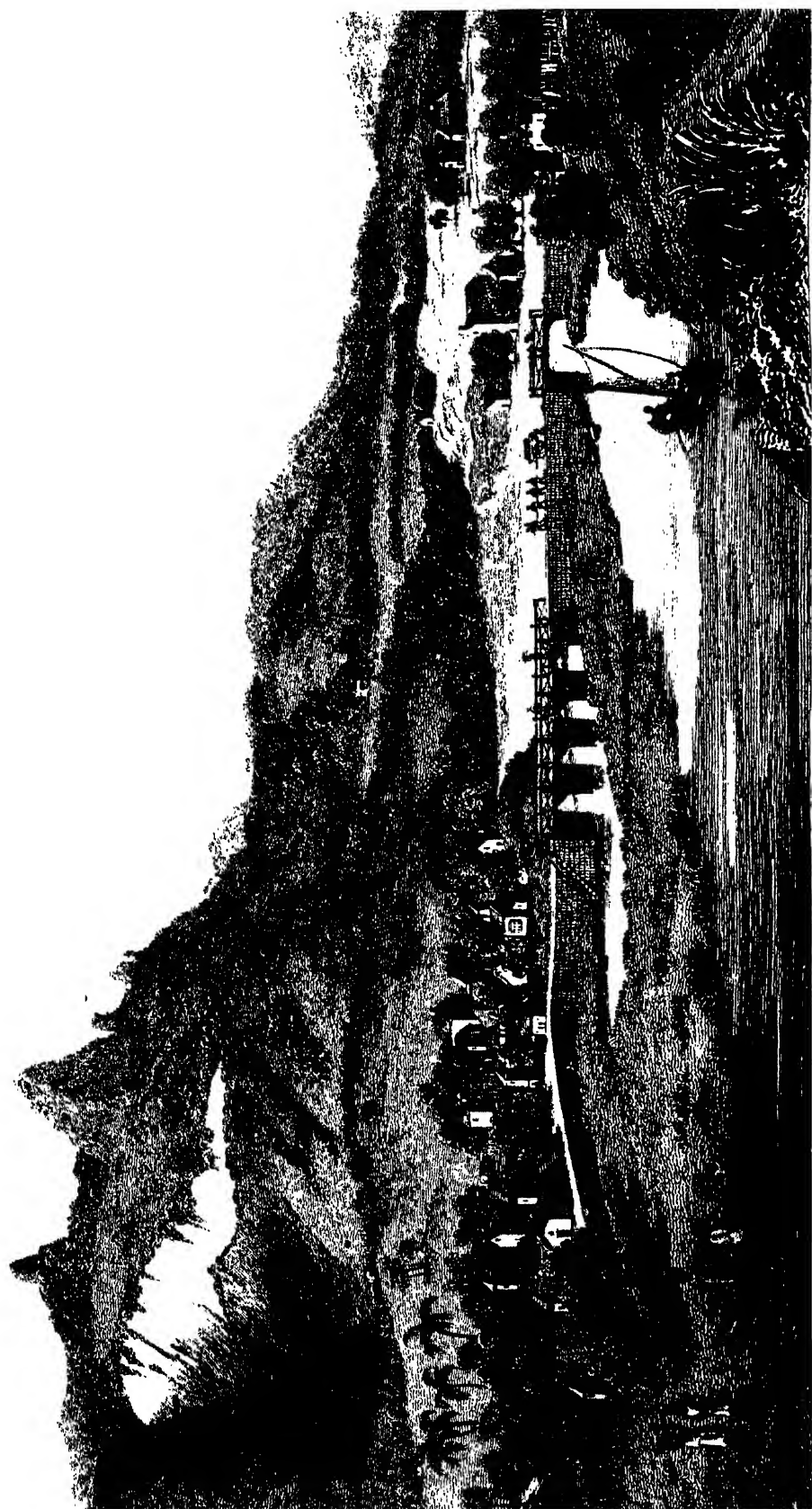














and above all M. Lissot-Geoffroy, a hasty sketch of the meteorology of the Isle of France. The mineralogical and geological details which follow are not less interesting nor less novel; they are the offspring of our mineralogist M. Lissot.

"The Isle of France is entirely volcanic; but many centuries have elapsed since the extinction of its fires, and some great revolution appears to have changed the primitive state of this ancient crater. In fact, all the mountains of this island are spread around it like a girdle of immense ramparts; all of them slope in a greater or less degree towards the sea, while, towards the center of the island, their sides are abrupt and oftentimes perpendicular. All these mountains are formed of parallel layers inclined from the center of the island towards the sea: these beds have, the one with the other, an exact correspondence; and where they are interrupted by intervening vallies or deep fissures, they are seen reproduced at relative heights on the opposite sides of each of the mountains which form the vallies or fissures. From these observations, it incontestibly results that all of them have the same origin, all the same date of formation; and that, formerly united, they could only be separated afterwards by some violent and sudden revolution.

"What can this last revolution have been? All facts unite to prove that the whole island once formed one enormous burning mountain\*; that exhausted, if I may say, by its eruptions, it bent under its weight, engulfed in its abysses the major part of its mass, and left standing of its immense vault nothing but its foundations; the wreck of which, opening at different points, forms the present mountains of the island†. Some elevations (pitons) of conic form, in the center of the country, the Piton du Centre, for example, appear of an origin posterior to the falling in of the crater, and seem to have been the last vent by which the subterranean fires exhaled their vapours.

*Mineral Productions.*] "Such is, generally, the physical organization of the Isle of France. I shall abstain from entering more largely into the subject, as it would be incompatible with this relation; there remains I should speak of the rocks that compose the soil: they chiefly belong to that class designated by Dolomieu, under the name of argilo-feruginous lavas; are porous in a less or greater degree; mostly porphyritic, with crystals of peridot‡ of divers shades, occasionally prismatic; of

\* M. Gentil, Royal Academician, who minutely examined the geology and mineralogy of the Isle of France, and whose memoir is published in the *Memoires de l'Academie Françoise*, 1764, denies this position altogether, and adduces arguments of far greater validity than the theoretic assumptions of M. Bailly, assumptions altogether unsupported by analogy. Neither calcined or melted bones, lavas, pumice, or scorie, found wherever volcanoes have existed, are, according to M. Gentil, seen any where on the Isle of France; while schistus, freestone, granite, and slates, in their natural state, and without having been fused, are found in various parts of the island, which could not be, had, as M. Bailly assumed, this island formed one immense burning volcano. *Ta.*

† Should not then these mountains participate in the nature of volcanic matter? The reverse is the fact: for although on the shore near the Island of Amber some volcanic indications appear, they are undoubtedly the result of a volcano which once existed on the spot now the Isle Platte; since Bory de St. Vincent relates that M. Lissot, before noticed by M. Peron, informed him that, having visited this island, he had noticed the existence of a crater; and since the Islet Columbia is represented by the same Bory de St. Vincent, (a companion in the voyage,) to be no other than an enormous column of basaltic lava. This point, however, has required annotation here, had not M. Gentil, (whose observations are assuredly more valuable than those of the disciples of the new school, since theirs, in this instance, are derived not from facts, but from theory alone,) noticed the existence of volcanic indications on the coast near the Islet of Amber, and computed these to have proceeded from the Island of Bourbon. The other islets in the group are black or brown, according to Bory, but the Isle Platte is dazzling whiteness. *Ta.*

‡ A precious stone of the emerald kind, whose green colour inclines to yellow when brilliant-cut, it possesses sometimes, like the tourmaline, the property, on refrigeration, of becoming first heated, and then cooled. *Ta.*

pyroxene, and of feld-spar, almost always in a state of alteration from their pristine condition.

“ These rocks are easily decomposed, and their ruins, carried away by the rains, form in the low parts of the island thick beds of a reddish sort of clay, used in potteries for making alcarrazas or permeable vases for the frigeration of water, pots for claying sugar, &c.

“ In the pores and cavities of some lavas, carbonated lime is found in a crystallized state, of various forms; primitive chabasite zeolite; phosphate of lime, of iron, &c. Oxided-hematites of iron, in grains the size of a nut, are found in some low and marshy places: this substance was formerly worked, but the scarcity of wood, and the high price of labour, soon put a stop to the foundries and forges.

“ To conclude this geological sketch of the Isle of France, I must add that it is surrounded on all points by a girdle of madrepores, which renders approach to it exceedingly dangerous: these madrepores spread themselves every day; many islets are formed by them; others also are continually forming of the same elements, with a growth so rapid as almost to be visible; and the principal island, by their means, is constantly receiving a new accession of territory. Of the extreme quickness of accumulation of these zoophytes, we ourselves saw a most extraordinary specimen. A vessel, on board of which the admiral's flag was hoisted, some little time after our departure sunk in the port; on our return, that is to say, two years and a half afterwards, the madrepores had so completely surrounded the ship, as to identify it with the rock on which it fixed\*.

*Vegetable Earth.*] “ The soil of the Isle of France, as we have seen, is essentially volcanic; but widely different in this respect from that of Teneriffe: it is covered almost uniformly by a bed of vegetable earth of tolerable thickness, which equally admits water to filter through it, and promotes vegetation. To judge from my individual observations, it appears evident that the principal element of this valuable soil is the lava itself, changed and decomposed by the united action of a long series of ages, heat, moisture, vegetation, &c. I noticed in those masses of compact lava, which form the mountains of the island, a gradation of change, which, from the most solid basalt,

\* Islands at great distance from continents, the origin of which is demonstratively volcanic, rise chiefly, perhaps exclusively, from a considerable depth of sea, as is shewn in all the instances noticed by M. Bailly himself of the volcanic islands of the Atlantic, (see chap. 2d of this work), and is the case with the the Island of Bourbon: the sides of such islands, moreover, towards the sea, are rugged and steep; now in neither of these points does the Isle of France assimilate to them. The depth of water round its shores is not considerable; for at the distance of several miles from them are different islets formed by banks of madrepores, the diminutive artizans of which do not carry on their labours from any great profundity to the surface; moreover, the reefs which surround this island, many of them above the sea, are of coral or madrepores; and that off Coral Point, west of the bay of the cape, according to Bernardin de St. Pierre, rises fifteen feet above the surface, and evidently points out a retrocession of the sea in this part. Again, the shores in only a few parts are lofty, and where they are the rocks are almost constantly composed of madrepores, fragments of which, triturated and pulverized by the action of the sea, not only form the beach, but also all the low bordering lands of the island. Hence, as no craters, nor the least similitude of them, appear on the island, as lava, volcanic glass, melted stones, puzzolana, and scorix, are not any where found; for what Mr. Bailly denominates, after M. Dolomieu, argillo-ferruginous lava, may certainly be doubted, to be truly lava; as, on the contrary, primitive earths are found on the island, schistus, beds of shells, undecomposed by fire; stones of many kinds, capable of fusion, but in an original state; beds of slints between rocks; an infinity of large pebbles, on the very summits of La Decouverte, and the other mountains and valleys between them, of different nature to the components of the rocks, and unchanged by fire; hence, I say, the hypothesis of M. Bailly, presuming this island to have been the crater of one immense volcano, must fall to the ground, and be reckoned equally gigantic and vain. Tr.

seems

seems to descend, by a multitude of intermediary degrees, to the vegetable earth itself. On exposing this earth to the action of a violent fire, it shortly assumes a very deep red-ochre colour; a consequence, no doubt, of the increased oxidation of the iron, in almost a metallic state, contained in the unchanged basalt.

*Fertility of the Soil.*] “Whatever the origin of this vegetable earth, it is of excellent quality; and, wherever of sufficient depth, the progress and strength of vegetation is extraordinarily great, and the number of plants cultivated with success on the island is in consequence truly prodigious: what is most remarkable, in midst of such a profusion, almost all these vegetables are exotic, yet naturalized have all equally succeeded. In order to form a just idea of this fertility in the country we are describing, a visit to the garden of the Government, in the plain of the Pamplemousses, is indispensable. Here it is that the respectable M. Cérè, in the space of thirty years, has succeeded in naturalizing an incredible number of trees and shrubs, brought, some from the burning plains of Africa, others from the humid shores of Madagascar, others from China and Pega, and others again from the banks of the Indus and the Ganges; many are indigenous of the summits of the Ghauts, others of the exuberant vallies of Cashemire; most of the islands of the great archipelago of Asia, Java, Sumatra, Ceylon, Bornea, the Moluccas, the Philippines, even Otaheite, have been put under contribution, to encrease the vegetable wealth and ornament of this garden; the Canaries, the Azores, have offered their tribute; the orchards and shrubberies of Europe, and the forests of America, in the same view, have been robbed of their charms: here many of the productions of Arabia, of Persia, Brazil, the coast of Guinea, and Caffraria, spring into life and breathe a foreign air; and we ourselves enlarged its store by numerous specimens of the singular vegetables from the forests of Austral climes. Here, wandering through long and silent alleys, are seen collected all these precious guests, astonished to find themselves the inmates of our home: how sweet the sensation I experienced, on contemplating the teak-tree, colossal lord of the equinoxial woods, whose timber forms the almost imperishable ships of India! the bread-fruit tree, whose savoury food supports the nations of the great equatorial ocean; the rafia of Madagascar, that valuable palm, which yields the delicate and corroborative sago; the nutmeg-tree, which, ravished by the respectable M. Pouvre from its natal soil, will shortly release us from the tribute we yet pay to the Dutch; the clove-tree, whose numberless fruit of a beautiful rosy hue, produce such a fine effect, and which already yields more than a sufficient supply of cloves for the consumption of our islands; the badamier, with large leaves of a mild green, which refreshes the sight, and which bears a small elongated almond of more delicate flavor than our finest walnuts; the ebony-tree, to which we are indebted for a wood of so much value in the arts, so precious on account of the beautiful polish it takes, and its shining black colour; the Pamplemousse-tree, the fruit of which is a kind of orange of the size of a small melon, and its rind made into excellent sweetmeats; the tamarind-tree, the pads of which yield that sweetly tart pulp so useful and so grateful as a medicine; the dwarf orange-tree of China, only a foot in height, bearing fruit the size of the coffee-berry, and which, like that, is distinguished by its grateful lemon odour; the Hymenea, a charming tree, whose leaves opposed in pairs, symbol of a happy union, seem constantly inclined to join each other; the areca-tree, whose elegant stem rises aloft, and produces those elements of areca nuts, so much in request for the masticators of betel, of which they form the essential base; the carambolier, the fruit of which has four salient sides, and contains abundant juice of a slightly acidulous taste; the jaquier, a counterpart of the bread-fruit-tree, which throws out, the whole

whole length of its stem, fruit of an enormous size, and of the shape of a long pumpkin, the precious aliment of slaves \* ; the litchi, the tuberculous and coriaceous bark of which encloses a pulp of extreme fragrance ; the mangoofan, a native of China as well as the preceding, and which in that country the people still persist in asserting to be the finest of all the known fruits ; the coffee-tree, so well known at this time in Europe, the little berries of which, containing each two grains, are enveloped with a beautiful scarlet coat ; the manguier, resembling our pear-tree, and which, modified by culture, like that presents numerous varieties ; the banana-tree, the mere name of which awakens so many pleasing ideas, so many grateful remembrances ; the cocoa-tree, so much celebrated in all relations of voyages, and of such fine effect in equatorial scenery ; the palmista, or cabbage-tree, which only once bears the precious cabbage at its summit, and maturing this, dies, a cabbage which may be prepared in so many different ways ; the velongos of Madagascar, whose fruit, symmetrically disposed in an immense bunch, so perfectly represents a cluster of cray-fish ; the jambos, the fruit of which, similar to small black damascenes, like them have an odorous and sugary pulp ; the jam-malac, or royal jam, which forms such beautiful fences ; the thorny bamboo, so well adapted for impenetrable hedges ; the raven-tara, the leaf and fruit of which are so susceptible of furnishing a cheap and grateful spice † ; the avocacier, the fruit of which, close and yellowish, bears some resemblance to our melting pears, but, more insipid, requires to be seasoned ‡ ; the guava-tree, which in the midst of forests furnishes a salutary refreshment § ; the cinnamon-tree of Cochin China, the bark of which is not inferior to the cinnamon of Ceylon ; the baobab, monkey's bread, or adanionia, the largest and widest spread tree that is known ; the vacois, whose shoots, of an immodest shape, descend from its stem to form new roots, and whose leaves are employed for so many useful purposes ; the frangipanier ||, whose beautiful alabaster-like corolla exhale such an exquisite perfume ; the cotton-tree, that yields us its down, after the maturity of its grains which it served to swathe ; the iron-wood-tree, a valuable tree of rapid growth, which thrives in the most arid spots, and might possibly be naturalized in our southern provinces ; the attier, the tuberculous fruit of which, enclosed in a hard, thick, and coriaceous shell, is a savoury and delicate pulp, compared by so many travellers to sugared cream ; the China-rose, which, growing naturally in the midst of forests, constantly unites its blooming flowers to those of the odorous jessamine, and the beautiful pervenche of Madagascar ; the papa, whose milky and caustic juice is employed as an excellent vermifuge, and whose fruit is the choicest at the table of the epicure ; the ravinal or traveller's tree, so named from its property of furnishing abundance of excellent water when pierced at the base of its leaves ; the jamrofa, which bears fruit of the most beautiful rose-colour, and from which, after fermentation, a spirit of such delicious fragrance is distilled ; the cassia-tree, which furnishes pharmacy with one of its most simple and mild purgatives ; the date-tree, the carroulier, the myrabolan, the ben, varnish, and incense trees, the milk-wood-tree, the tree of Venus, the latanier, the roussaille, the tallow-

\* Its coat resembles spagreen, and is of a greenish hue ; it is full of grains, the coats of which alone are eaten : these consist of a white gelatinous and sweet skin. TR.

† This is a species of nutmeg-tree : the essence prepared from the leaf unites the fragrance of the clove, cinnamon, and nutmeg ; and the oil extracted from it is, in the Indies, preferred for culinary preparations even to cloves themselves ; the fruit, of a globular form, flattened at the extremities, yields a more delicate perfume, but is not so strongly fragrant as the leaf. TR.

‡ It is eaten with sugar and lemon-juice, and though pleasant, is of a heating quality. TR.

§ The tree resembles a medlar ; the flower is white ; the fruit, which smells like bugs, is frequently made into jelly. It is astringent, and is the only fruit in the island which breeds maggots. TR.

|| Jessamine-tree.



tree, tea-tree, Aden coffee-tree, the wax-tree of Cochin-China, soap-tree, cubeb, lilipè, the longana of China, the wattier, vancaflay, cacao-tree, the roocoo, cherembellier, bibassier, velvet-tree, &c. &c. : but such is the profusion of useful vegetables which the industry of man and his fortunate activity have succeeded in collecting on so narrow a theatre, that even to enumerate them all would cause me greatly to exceed the natural limits of this chapter ; and, when one reflects that this astonishing multiplication of interesting vegetables is the result of a few years dedicated to experiments and their production, the honourable fruit of the zeal of a small number of individuals, one feels strong sentiments of gratitude toward the authors of such numerous benefactions, at the head of whom are to be classed La Bourdonnais, the immortal Poivre, Hubert de Cerè, Commerçon, Du Petit Thouars, and Martin. The importation of the cherry into Italy illustrated the name of Lucullus among the Romans, and renders it dear to us still. How many modern naturalists have done a hundred times more for the happiness of the human species, yet have lived unfortunate, and unknown even to their fellow countrymen.

In order to complete the general sketch I have given, I should now speak of the animals of the Isle of France and of its inhabitants ; but other climes and different races call for our enquiries ; let us then hasten the termination of what further relates to our stay on this island. Proportionately great with the gratitude due from the individuals of our mission to the inhabitants for their kind reception, were with our chief the grounds for repenting his having touched at this colony ; but, without entering into the unpleasant detail of this portion of our history, I shall content myself with observing, that the third vessel we were to have taken up here was refused us ; that we were unable to obtain any of the most indispensable provisions ; that we lost here forty of our best sailors who deserted, and that a great number of officers, naturalists, and artists belonging to the two vessels, weary of the bad treatment they had experienced from our commander, or reasonably alarmed for the future, remained in the colony.

It is generally allowed that the wood of hot countries is more heavy and stronger than that of the trees of more temperate regions ; the experiments of Mr. Lisle powerfully support this opinion : from them it results, in fact, that the oak of Europe, compared in these two respects with twenty-two different kinds of wood of the equatorial regions, ranks but the seventeenth in point of specific gravity, and only the nineteenth in specific strength. (See the annexed table.)

## COMPARATIVE TABLE

Of the relative Weight and Strength of several kinds of Wood of the Isle of France made by Mr. LISLET GEOFFROY, Capitaine du Genie Militaire, and formerly Correspondent of the Academy of Sciences.

Vulgar Names.		Botanical Names.	Weight of the Cubic Foot.		Specific Strength.
			lbs.	oz.	
Iron Wood	-	<i>Stadtmania</i>	87	12	3872
Stinking Wood	-	<i>Fatidia</i>	75	2	3141
Small leaved Natte	-	<i>Imbricaria</i>	74	1	3100
White Olive	-	<i>Olea</i>	63	2	2917
Red Tacamahaca	}	<i>Tectona grandis</i>	53	2	2720
Teak					
Large leaved Natte	-	<i>Imbricarii</i>	72	1	2660
Red Iron Wood	-		84	10	2367
White Cinnamon	-	<i>Laurus</i>	56	8	2317
Black Cinnamon	-	<i>Elæocarpus</i>	41	14	2290
Red Olive	-	<i>Rubentia</i>	56	6	2037
Red Colophonia	-	<i>Colophonia, Burseria</i>	59	2	2087
White Apple	-	<i>Eugenia</i>	61	4	2015
Benzoin	-	<i>Terminalia Benzoin</i>	57	4	2005
Monkey Apple Natte	-	<i>Syderoxyton</i>	57	3	1900
Marbled Cinnamon	-	<i>Elæocarpus</i>	58	14	1880
White Iron Wood	-	<i>Syderoxyton</i>	58	4	1783
Red Apple	-	<i>Eugenia</i>	60	0	1750
Lousteau	-	<i>Antirrhæa</i>	56	8	1750
OAK	-	<i>QUERCUS robor</i>	56	1	1702
Red Tacamahaca	}	<i>Colophyllum Caloba</i>	52	5	1618
Fir					
Bigaignon	-	<i>Eugenia</i>	64	3	1500
Baffin	-	<i>Blackwellia</i>	47	11	1500
White Colophonia	-	<i>Merignia</i>	49	3	1350

Experiments to determine the relative strength of the different woods may be made in various ways : that employed by Mr. Lislet was the following : he prepared prisms of equal dimensions every way, as nearly as possible, of the different woods ; laid them on two supporters firmly fixed in the ground ; and suspended from the middle of the prisms the weight requisite to break them. The weight required determined the relative strength of the different woods to be as in the table above.

## BOOK II.

FROM THE ISLE OF FRANCE TO TIMOR INCLUSIVELY.

CHAP. V. — *Voyage from the Isle of France to New Holland : Leutwin's Land.*

[From 25th April to the 19th June 1801.]

THE 25th April 1801, we sailed from the Isle of France, directing our course to New Holland : we had scarcely got under weigh before it was announced to us from our commander that, from that day, we should only have an allowance of half a pound of newly-baked bread every ten days ; that the allowance of wine per diem would be changed for three-sixteenths of a bottle of the bad rum of the Isle of France, bought for a trifle in that colony ; and that biscuit and salt meat from that time was to be our only food. Thus, on the very outset of a voyage, as tedious as difficult, we were at once abridged of bread, wine, and fresh provisions. Woeful prelude to, and chief source of the misfortunes which afterwards overwhelmed us.

The 26th and 27th we had gusts of wind and rain ; the 29th, in latitude  $25^{\circ}$  south, the barometer had risen from  $28^{\circ} 3'$  to  $28^{\circ} 4' 5'$  : through the whole of the night it rained, but gently. By the 5th May we reached the 29th degree of latitude and the 64th of longitude east. From the 5th to the 11th we had cloudy, damp, and rainy weather, produced and maintained by the winds from the north-east, north, and north-north-west ; these winds at length brought on a violent gale of three days duration, in the course of which the barometer sunk nine lines. The 9th, especially, was a shocking one ; the sea ran high and was covered with foam, the winds blew in impetuous gusts, and the torrents of rain were perpetual till the next day at noon.

From the 11th to the 15th we continued our course under the parallel of about  $33^{\circ}$  of latitude, the barometer maintaining itself at  $28^{\circ} 4'$  to 5, and the thermometer gradually sinking from  $22$  to  $12^{\circ}$ . The temperature of the sea at its surface exceeded, but in the slightest degree, that of the atmosphere.

From the 15th to the 20th we continued to make but little way towards the south, on the last day not having advanced beyond the 35th degree : but we already were  $100^{\circ}$  east of Paris, and were consequently not more than about 150 leagues from the western point of New Holland, which our commander was resolved to make.

In fact, the length of time occupied in our passage from Europe to the Isle of France, and our stay at this last place, much longer than it ought to have been, had caused us to lose a part of the season favourable for the prosecution of our designs, and our chief was fearful of making Van Diemen's land ; he consequently resolved on commencing his exploratory expedition with the north-west point of New Holland, reserving for the spring his voyage to the south. This determination gave uneasiness to us all, because it was not imperatively exacted by our real position ; the season, though already far advanced, was not so much as to hinder our proceeding to double the south cape ; and as, from that point, we had to return to the equatorial regions, it seemed to us but a prudent part to have more closely respected the instructions of government, which we knew to be the result of profound meditation and the most extensive research. In succession will be seen how much this first change in the order of our operations was, from its consequences, productive of others.

From the 21st to the 25th May we continued to near the eastern coast of the continent we came to explore ; we nevertheless were more than 100 leagues distant from

it, and already all the meteorological instruments experienced the influence of its neighbourhood : in fact, during the first part of our voyage, I observed that the east winds were uniformly moist ; that they were almost constantly accompanied by fogs, showers, and even violent torrents ; all the instruments shewed a progression analogous to the state of the atmosphere. By these same winds the thermometer was raised, the hygrometer propelled towards saturation, &c. and the mercury lowered in its tube ; but scarcely were we under the lee of New Holland before *these winds, which could not reach us till after traversing this continent at its broadest part, exhibited a character completely the reverse*. Under their influence the atmosphere was clear and serene ; the hygrometer gradually denoted less humidity ; the barometer rose ; only the thermometer marked still the same or a slightly increased temperature : surprized at a change so rapid and complete in the meteorological phenomena, I reflected on all its circumstances, analysed all its elements, and at length concluded, I might deduce from it the remarkable consequence, that the part of New Holland to which we proceeded must be chiefly a low country, destitute of high mountains, of great forests, and of large collections or even considerable streams of water. It is not for me to digress in order to enter into a detail of the memoir which I digested on this subject ; it will be sufficient I should observe, that our commander, the astronomer, and those of my friends to whom I communicated it several days before we came in sight of land, though struck with the congruity of the deductions I drew with the phenomena, were yet unwilling to admit of them, until forced to yield by experience, they granted the importance of this new application of meteorological phenomena to the physics of great continents. Hereafter I shall return to this subject, where I shall have occasion to shew, towards the extremity of New Holland, a manifestation of the same phenomena with winds from the north-west, as those I have here indicated with winds from the east and north-east.

The 27th, at day break, we descried for the first time the land of New Holland, its humble profile resembling a blackish line extended from north to south : we endeavoured to approach it, but the currents and winds were so adverse that the remainder of the day was spent in useless efforts ; in the evening we laid to ; of this circumstance we availed ourselves, my colleague Maugè and myself, to throw out the drag : this instrument, mostly employed for fishing coral, is so adapted as to bring up from the bottom of the sea whatever bodies it may meet with. We hoped, by means of it, to obtain the first articles of our Australasian collections, and the result surpassed even our wishes.

Deceived by the charts furnished us in Europe, we expected in the evening of the 28th to make Cape Leuwin, which forms the most western point of New Holland, and north of which directly began the portion of Leuwin's Land, yet unknown, which we now descried. According to these observations, this cape should be placed in latitude south  $34^{\circ} 7' 50''$ , longitude east of Paris  $112^{\circ} 26'$ , but our after-operations taught us that, in this first recognizance, we were mistaken as to the point which ought really to be regarded as Cape Leuwin.

That day the land, we had in sight appeared extremely low, barren, sandy, and of an obscure colour, relieved by some white spots. A number of whales approached very near to our ship. About midnight the drag was again cast, and again brought up a multitude of interesting objects, on the description and drawing of which M. Lesueur and myself were employed during the remainder of the night, as we had been the day before.

The whole of the 29th we coasted at a very short distance ashore, almost entirely the same as that of the days before ; it is thus described by M. Depuch : " Along the whole space

space we traversed the land is low, or of little elevation ; the inequalities of the coast are gentle and rounded ; often, indeed, the coast is so even, that a considerable portion of it might be designated by a gently undulating line ; the shores are every where bordered by gentle risings. These hills have a blackish and mournful aspect ; in many parts are remarked white places of more or less extent, one of which stretches the space of half a mile, is of the whole height of the coast, and may furnish an important point of recognition for navigators. By examining this point I discerned all the characters of a sandy soil, of which composition the whole of this unknown coast appears to be. The dark aspect it wears in common is caused by a wretched and feeble vegetation ; the spots deprived altogether of vegetation are white."

The 30th in the morning we doubled a cape ; in front of it a reef projects about a quarter of a league out to sea, against which the sea breaks with violence. We found it to be the point of entrance into a great bay, which, from the name of our principal corvette we called the Bay of the *Geographe* : the cape I speak of was denominated the Cape of the Naturaliste ; it lies in  $33^{\circ} 28'$  of south latitude ; longitude  $112^{\circ} 35' 7''$  east of Paris. On the outside and nearly about the middle of the bay is a very dangerous reef, which we termed the Reef of the Naturaliste. At five in the afternoon, we cast anchor at the entrance of the bay we had just discovered. The barometer during the five last days stood at from  $28^{\text{p}} 3'$  to  $28^{\text{p}} 6'$  ; the thermometer varying from  $14^{\circ}$  to  $17$  ; the hygrometer from 78 to 90. The atmosphere was perfectly clear, thanks to the dry and cold winds which then predominated from the south.

The 31st in the morning, the commander sent his long boat, under the direction of M. Picquet, to determine exactly the position of Cape Naturaliste : " But," says M. Boullanger, who was charged with this mission, " we found this point defended on all sides by large rocks, on which the sea broke with fury ; these breakers extend along a part of the coast of the bay, and some even stretch out to sea. We endeavoured to find a passage between these breakers, but in vain ; the coast every where appeared to refuse a landing : we were obliged to pass the remainder of the day in the boat, the whole of the night also, and part of the next day, without being able to regain the ship, the wind continually driving us away, and keeping us at distance."

While our unfortunate companions, exhausted with fatigue, and drenched with seawater, wandered about the sport of the waves, a second embarkation under M. H. Freycinet succeeded in effecting a landing. Messrs. Dupuch and Riedlè were the only ones of our associates who accompanied him, and the first Europeans who set foot on these unknown shores. They were able to remain there but a few hours, during which they made divers remarks on the physical quality of the soil, and the productions of the vegetable reign : as we shall have occasion to revert in another part with more particularity to this object, it will be sufficient here to notice that M. Dupuch found, at the bottom of the bay where they landed, a very beautiful species of granite, in regular and very numerous strata, a mode of disposition of granitic substances suspected by Saussure, but the reality of which till now had been disputed. This remarkable phenomenon, rendering that part of the bay especially interesting, we thought it but just to give it the name of the naturalist who first observed and described it. The Creek of Dupuch is east of Cape Naturaliste, at a short distance from that headland.

The 1st June, after shipping our long boat, we set sail for the purpose of exploring the southern coast of the bay of the *Geographe* : at noon we were abreast of a large headland, which we denominated Point Picquet, from one of our most estimable officers. At seven we anchored near the bottom of the bay. Hitherto we had not distinguished the least trace on these melancholy shores of their being inhabited ; but this evening

evening a large fire, which suddenly rose beyond the Downs, evidenced the existence here of some wild hordes of the human species.

At this period we observed highly singular effects of mirage, or refraction of terrestrial objects; now the most even and lowest lands appeared to us raised above the water and deeply torn in every part, now their crests or ridges seemed reversed, and in this state resting on the waves; at every instant the eye was cheated by the vision of long chains of reefs and breakers, which fled before us as we advanced\*. This phenomenon, curious in itself, had its disadvantage; for, as all astronomical observations are dependent on the state of the atmosphere, its refrangent quality at this time, by its variation, occasioned in all those we made a most vexatious disparity; those of the evening, for example, giving us greater way to the eastward than those of the morning. This phenomenon of refraction appeared to me to result chiefly from the prodigious changes of temperature and moisture that took place at this time in the atmosphere of these regions, as I shall have occasion more especially to remark elsewhere.

The 2d and 3d we continued to explore the bay; the latter day we anchored, at eight in the evening, about two leagues from land, in twelve fathoms, with a bottom of fine and whitish sand.

The 4th, at dawn, in company with Mr. Breton, who commanded the small boat in which we embarked, and Mr. Leschenault, a botanist, I made for shore. Soon as we gained the strand, I hastened towards the downs of sand which bordered the coast, and directed my steps towards the interior in search of the natives, with whom I anxiously wished to establish a communication; but vainly did I follow through the forests the recent footsteps I distinguished; and, after a fatiguing search of three hours, I retrod my sorrowful steps to the shore, where my companions, alarmed at my absence, already awaited me; we embarked, but were six hours in reaching our vessel, so contrary were the winds and currents.

Messrs. Bernier, Riédélé, Depuch, and Maugé, likewise landed at another spot, and shortly returned. More fortunate than we had been, they had discovered a native fishing on the shore near the place where they landed. This individual seemed to them to be an old man; he had a beard, was of a brown colour, and had no other covering

\* These refractions are very common, although but little noticed, generally speaking: they are frequently observed in the Straits of Messina, and there they are termed *fatu morguna*, the peasants and fishermen ascribing these pictures in the air or on the water to the fay Morgan. By the English, Irish, and Erse inhabitants of our western shores, these optical delusions are likewise often seen, and by the two latter are called *feadhreagh maireathme*, and *duna feadhreagh*, sea fairies, or fairy castles; they are likewise visible occasionally in Norway, Iceland, and Greenland, in Switzerland, in South America, on the highest summit of the Andes, in the midst of the Atlantic ocean, and in the Mediterranean, (see Swinburne's Travels, Spallanzani, Crantz's Greenland. Icel. Ann. Ortelius in Thesauro Geog. Saxo. Antiq. Poema. Phil. Mag. vol. xiii. p. 336, where is a very able dissertation on this subject by Mr. W. Beaufort, A. M. Phil. Mag. vol. xiv. p. 176.) This note is chiefly added for the purpose of a remark of considerable interest as it respects the continent of New Holland; M. Peron notices that the refraction occasionally presented the land, which he conceives to be the low shore contiguous, as *deeply torn in every part*; now, as in the last authority quoted, Phil. Mag. vol. xiv. p. 176, it is observed, that Mount Ætna, which is 160 miles distant from Malta, was clearly represented on the surface of the water the 17th April 1785, at a distance, from an observation made by C. Dangos from the observatory of Malta, of only 18000 yards, or about eleven miles; and as these refractions are constantly faithful representations of objects; as also the coast being flat, could not have been that refraction which appeared *deeply torn in every part*. Is it not highly probable that, on this occasion, the accidental refraction may have presented the naturalists of the expedition with a picture of the interior of the country, at, possibly, some very considerable distance in the line from the ship where the refraction was noticed; a country highly mountainous, (for, if distant, it must have been so to have been represented,) and its lofty mountains deeply torn and separated by profound scissures from each other? T. A.

than the skin of a kangaroo, thrown over his shoulders, and which scarcely covered his loins. The aspect of these unknown beings did not at first seem to create much uneasiness in the fisherman; but perceiving they made towards him, he hastily seized three lances laying by him on the ground, and presenting a bold front, addressed them in a very animated manner, repeatedly pointing to the ships, and apparently bidding them return. Equally surprized at the appearance of this new Scythian, the warmth of his address, and the loftiness of his gait, our colleagues halted, that they might give him no interruption. When he had finished, Mr. Depuch, a mineralogist, advanced singly and unarmed towards the savage, exclaiming *taïo, taïo* (friend, friend), and presenting him a necklace of glass beads, the lustre of which seemed to excite the liveliest admiration in the old man; still he shewed no less repugnance to letting Depuch approach him, and, on his continuing to advance, the old man took to flight with a speed which astonished all who saw him. While this was passing on one part of the coast, five or six other savages made towards the long boat, guarded at the time only by a single sailor: on seeing these wild beings approach, this man, justly alarmed, cried out lustily to recall our people, on the return of whom the savages hastily fled over the downs as swiftly as the fisherman.

The beneficent Riédlé, on this expedition, made an ample collection of new plants, in return for which tribute from these shores, he sowed or planted in their stead a quantity of wheat, maize, barley, oats, pear-trees, apple, apricot, peach, and olive-trees, with a large number of European vegetables. Affecting exchange, one such as ever should have been the basis of relations between different people, and such as was constantly repeated by us in the places where we were enabled to effect a landing.

In imitation of our commander, Captain Hamelin sent out his boats to reconnoitre the bay in the south-south-east part. The officer who commanded one of these expeditions, Mr. Harrison, reported on his return, that he had discovered the mouth of a river, which seemed to proceed from a great distance inland. This report was the more grateful, from our having been unable hitherto to discover the least trace of fresh water on the land of Leuwin, and from our not being ignorant that the navigators, who had before us examined several points of the north-west coast of New Holland, had not been more fortunate than we. It was therefore agreed, that on the morning of the next day, the long-boat of the *Geographe*, under the command of Captain Lebas, and the small boat of the *Naturaliste*, with Captain Hamelin, should examine this river, and ascend it as far as possible. Messrs. Depuch, Leschenault, Riédlé, Lefueur and myself were allowed to accompany the expedition, and with us our physician, M. L'Haridon.

On nearing the shore, our two captains agreed that, as the long boat drew too much water for an expedition up the river, it would be better to let her lay at anchor in the Offing, under the safeguard of part of the crew, the remainder ascending the river along its banks; while the small boat should proceed as far as the depth of water would permit.

These arrangements concluded, I left my colleagues, and proceeded along the strand: it was low water, and consequently, the best season for collecting the productions of the sea. I gathered together, in a short time, a very large number of new objects, among which a beautiful species of *orbulites*, alive. It is well known that the *orbulite* is a small species of solid *zoophytes*, confounded, before the observations of M. de la Marck, with real *nummulites*, and that hitherto these singular animals had been discovered in a fossil state alone. This is not the only discovery of the kind we



shall have occasion to present in the course of our narrative, for the shores of New Holland will afford, on many occasions, proofs of great catastrophes of nature.

The anxious desire I felt, however, 'to make my remarks on the inhabitants of these regions, shortly drew me from the shore: I passed the downs, and almost immediately afterwards was stopped by a pool, the margin of which was every where covered with salicornias, and on its salt waters numerous flocks of black swans displayed their elegant forms. Beyond this marsh, the supposed river, the mouth of which my friends were gone to enter, has its course. A vast number of the footsteps of the natives seemed to announce that many of them had recently passed it, and there I resolved to join on the other side. While in search of the most favourite place of passing, I heard the report of a gun at a short distance, and trusted that, in the sportsmen, I should meet with some companions in my project; but Messrs. Levillain and Bailly, to whom I addressed myself, far from being inclined to accompany, endeavoured to dissuade me from my intentions. I was not to be turned from what I had resolved upon; but, undressing myself, passed the river before them, and plunged into the first which skirts its left side. It was eleven o'clock, the sky was clear, the temperature mild; these circumstances added to my ardor, and full of hope to meet, in a short time, with some of the people of these shores, I continued my pursuit till it became suspended by a singular discovery.

Near the spot where I landed I perceived a valley, extending towards the interior, and apparently marking the course of some small rivulet; I conceived it my duty to ascertain the fact; unfortunately my suspicions were not verified, and I began to resume my steps, when a cluster of large trees, which by their colour were readily distinguished from those which surrounded them, attracted my attention. All these were white from the base of their trunk to the extremity of their branches.

Surprized at this appearance, I advanced precipitately towards this species of bower, equally excited by interest and curiosity. Both one and the other soon increased. Twelve trees of a larger size, amid many smaller, and irregularly confounded with them, formed a semi-circle, the two extremities of which terminated on the bank of the river. All these trees belonged to a new species of *Melaleuca*, remarkable for the extreme thickness of the bark, or rather the liber\*, by which it is enveloped: this liber, of very fine texture, and very pithy, adheres so slightly to the wood, that the least effort suffices to tear it off, in long ribbons, from the foot of the tree to the very extremity of the branches. In this manner the trees I allude to, had been deprived of their bark, and as the middle bark† is remarkably white, their colour resulted from the abstraction of the outer coat.

Within the area of the semi-circle formed by these white trees, were described three other semi-circles gradually less, as within each other, and ending with their extremities like the outward one at the river. The first of the interior semi-circles was a kind of seat of turf, raised about six or eight inches above the ground, and two feet wide; the turf was composed of a fine, light and very short grass, which grows abundantly near the spot: this verdant seat was festooned on that side which fronted the river, and each of the intervals between the festoons had evidently seemed as a seat for one individual; and twenty-seven festoons served to indicate an assembly of a like number of individuals.

In front of this bank of turf was a clear space, two and a half feet wide, covered with a black sand, found in abundance on the sea shore, and which forms a portion of

\* External part of the bark.

† The bark of a tree is composed of the epidumis or skin, the middle, and the outer bark or liber.

the foil of the interior ; it seemed to have been trodden by the individuals seated on the bank of turf.

A line of rushes separated this second semi-circle from the third ; these rushes, very close to each other, and in a regular line, were cut at the height of six inches from the ground.

The third and last semi-circle was wider than the preceding, and covered with the other species of sand, which I have observed is found at different places of the sea-shore, and is distinguished at a distance by its shining whiteness.

On this floor of fine and very even sand, a vast number of rushes had been planted, each at an equal distance from the other, and so distributed as to form a series of figures, or rather regular characters : all these rushes had been burnt to the level of the ground, so as to present so many round black points, plainly distinguishable from the floor of white sand in which they were planted ; hence the characters described by these series of points, were expressed in the most striking manner imaginable.

These figures, no doubt, coarse and whimsical, yet possessed somewhat original and deliberate : they represented especially a great number of triangles, of lozenges, and irregular polygons, some parallelograms, some irregular squares, but no circles whatever.

The remainder of the shore, to the brink of the river, was covered with a fine light and lively verdant grass. Lastly, on the very margin of the river, was a large tree, the venerable patriarch of this bower : its white trunk, bending to the waves, projected over them majestically ; and its branches, more horizontally spread than in the others, formed a kind of terrace of verdure. This remarkable tree seemed to have been more elegantly adorned than the rest ; in fact, not only had it been rendered white like the others, but its trunk and principal branches were decorated with wreaths of verdure.

The river served as a boundary to this retreat, and increased the charms of its position ; its cool and limpid waves, beating gently on the banks ; its course, visible to the sea ; the numerous fish disporting on its surface, and in its bosom ; the more than common strength of vegetation on both its sides ; every thing in this simple and charming spot conspired to awaken the gentle affections of the heart. How sweet ! oh, how truly sweet, the pleasure I experienced for a few seconds in abandoning myself to reflections incident on such a discovery ! “ This charming spot,” said I to myself, “ is, perhaps, consecrated to somewhat mystic, either of a public or private nature. Can the worship of a Deity be its object ! From the river and the marshes that bound it, the inhabitants, in great measure, are supplied with the aliment necessary for their subsistence.—Perhaps, new Egyptians, like the ancient inhabitants of the Nile, they have consecrated the river that feeds them.—Perhaps, at solemn epochs, they come to its shores to render a tribute of homage and gratitude.

Adverting afterwards to the singular figures ingeniously traced on the sand, they brought to my mind those famous Runic characters, formerly in use among the people of the north of Europe, and which, as well as these, consisted in a series of figures, coarsely traced, of circles, squares, and triangles, yet susceptible, from their different combinations, of transmitting all the ideas of the people who employed them ; like these I had just discovered, they were traced on the ground, on the barks of trees, and on rocks : those of which latter alone have passed down to our time : they likewise reminded me of those clumsy hieroglyphics which the Mexicans used in describing the annals of their history, and many of which consisted of figures badly expressed, of circles, squares, parallelograms, &c. ; those grotesque sketches discovered by Captain

Philippus on the rocks and trunks of trees, in the southern part of the Continent on which I was situate, likewise occurred to me ; those also which, at the southern extremity of Africa, the Boshmans are wont to engrave at the extremity of their caverns ; and those again, still more worthy of admiration, and, moreover, of far greater antiquity, which are seen in different parts of Ceylon, precious monuments of a people who appear no longer to have existence ; from all these assimilations, I concluded that the desire of communicating sensations and ideas has existed at all times, in all climates, and among all people ; that this so precious art of writing is of far greater antiquity than all tradition, and than all historical monuments ; and I hence regretted the more sensibly, my incapacity of discovering in the characters before me, the sentiments and ideas of the uncivilized beings of whom they were the work.

After paying all the attention due to this bower, I left the bank of the river for the interior of the forest. Every where I found my passage easy, on account of the distance the trees were apart ; the surface was generally clothed with a short, light, and delicate grass. I was unable however to discover any traces of fresh water. In some spots, where the ground appeared more moist than usual, I dug into the earth ; the water which trickled into the hole was brackish and salt : this saline nature of the ground appears to act as a repulse to all animals ; at least, I was able to distinguish none, and the traces of the kangaroo I perceived on the sand were extremely rare. Even insects were strangers on these shores, if the ant alone be excepted ; black legions of this insect indeed, though its special cantonments were the back of the downs, presented themselves in every part, and were as numberless as troublesome. I collected many new species of them, one of which, remarkable for its size, much resembles the formica gulosa of Fabricius ; but the history of these animals will be given more in detail in another part of my works.

A second remark I shall make on the singular country I then traversed : spite of the prodigious variety of trees and shrubs of which its vegetation was composed, no fruit was distinguishable that could apparently serve as food for man or animals. This remark was repeated over all the remainder of New Holland, with very trifling exception. Is it to this extraordinary absence, or at least this excessive scarcity of edible fruits, that the non-existence on this continent of animals, exclusively frugivorous, is to be attributed ? Hitherto, it is an established fact that no species has been found, or even the least trace of any. The monkey, for example, — innumerable companies of which are dispersed through so many parts of the world, which is found in so many islands, and even at the very door of New Holland, at the Moluccas, in abundance, — the monkey, I say, does not appear to exist in this great country ; and truly it seems difficult to conceive the manner in which animals of this description could subsist. Elsewhere we shall return to these interesting relations of the nature of the soil to its different productions.

In the mean time the chief object of my excursion seemed to fly before me in proportion as I advanced. The small outlets of the forest towards the river were now no longer seen, yet still I could only find a few traces of men imprinted here and there on the ground ; no dwelling shewed itself ; the most profound silence reigned throughout the forest, and nothing indicated its serving for the habitual residence of man. Yet, on every side, I distinguished a number of burnt trees, and vestiges of fires. By the side of some also I remarked a sort of bed, formed of the singular liber of the melaleuca, which I have before described, and which appeared to have been the resting-places of men, either united or alone. In short, every thing confirmed me in the opinion that the savages had no fixed habitation in these deep woods ; and that they preferred the

borders

borders of the salt river, the contiguous pool, and the vicinage of the sea, whence with greater ease they might procure the means of subsistence. In fact, it was in these places that we exclusively found such of their cabins as we saw, and of which we shall shortly speak. This too was the case with their wells or springs of brackish water, which, in a little time, was that to which we were ourselves reduced.

Determined by these reflections, and warned by the decline of day, I returned, crossed again the river, and forded again, but with some risk, the pool. On descending to the shore, I felt some alarm at not finding the boat, especially as it was now five in the evening, as the weather, so calm in the morning, had changed, and a strong breeze blew with violence from the sea. I was not, moreover, ignorant that the exploring of the supposed river could not have long detained our seamen and geographers, as I had acquired the certitude recently of this imagined river being but a very narrow inlet stretching some leagues in to the land, the bottom of which, as well as of the neighbouring marshes was muddy, and the waters of which had no other sensible motion than that occasioned by the tides of the ocean, with which it unites by the species of mouth we have previously described; its waters, moreover, were to the full as salt as those of the neighbouring marshes: from all these considerations I had reason to think their examination of the river must have been soon completed, and I was apprehensive of having arrived too late for the general embarkation.—How agreeably then was I surprized on meeting with my friend Lefueur and M. Ronfard, who, as well as myself, were in search of the boat: this, during our absence, had unfortunately approached too near to the mouth of the inlet, and in consequence had got too much to leeward of the point of rendezvous.

Messrs. Lefueur and Ronfard had had an interview of a singular nature with a female savage, and M. Lefueur communicated to me the following account. Independent of the small boat of the Naturaliste, commanded by M. Hamelin, a second was sent from that vessel in the course of the day. This was on the point of returning when M. Lefueur and M. Ronfard arrived at the shore. While conversing with the party from the Naturaliste, they discovered in the distance two persons proceeding along the strand. At first they took them for some of our sailors; but found them at length to be two natives. These people, mistaking them, no doubt, for their countrymen, continued to advance. When near enough to have hope of joining them, Messrs. Lefueur, Ronfard, and St. Cricy, the last the captain of the second boat of the Naturaliste, hastened with speed towards them, but were not quick enough to prevent one of the two, whom they distinguished to be a man, from escaping over the back of the downs, plunging into the thickets, and disappearing in midst of the marshes. The other was a woman in a very advanced state of pregnancy; despairing, without doubt, owing to her condition, of outstripping her pursuers, this woman instantly stopped, and squatting on her heels, and hiding her face with her hands, she remained, as if torpid by fear and surprize, in a perfect state of immobility, and apparently insensible to all that was passing near her. This wretched woman was altogether naked; a small bag made of the skin of a kangaroo, and fastened by a band made of rushes round her forehead, hung down behind to her loins. Our friends found nothing in this bag but some bulbs of orchys, after which the poor inhabitants of these shores seem to be very anxious, but which unfortunately are exceeding rare and small, the largest we saw scarcely exceeding a common nut in size.

In the colour of the skin, the nature of the hair, and the positive and relative proportions of the body, this woman perfectly resembled the other savages of New

Holland, which we shall have to describe more minutely in course of the work. In other respects she was, and that by the allowance of those the least nice in matters of the kind, most horribly ugly and disgusting. In every part she was meagre and destitute of flesh; her breasts, especially, were flabby, and hung down to her thighs. The utmost filthiness still added to this natural ugliness, and alone had been sufficient to have revolted the least delicate of our sailors.

After examining this unfortunate child of nature with that interest she could but inspire, our friends loaded her with presents: they gave her biscuit, mirrors, knives, snuff-boxes, necklaces, and what were still of greater value, a hatchet and two handkerchiefs. But, constantly seated on her heels, the poor creature continued in a state of stupor; and, unable to induce her to accept any of their presents, on leaving her, they left them at her side.

As we were still at a short distance only from the spot where this interview took place, M. Lefueur conducted me thither; but already the woman had disappeared, leaving on the ground where she had squatted the most unequivocal testimony of her fright, manifested, it should seem, among uncivilized people as with those in a polished state by spontaneous evacuations. However, the unfortunate being took away with her no part of the presents, to which we made an addition of others.

After this short and useless excursion, we proceeded towards the point where we expected to find the boat: night was approaching, and we had yet two leagues to go, we were consequently obliged to quicken our pace; still, spite of our accelerated walk, it was with difficulty I endured the cold occasioned from the wetness of my cloaths. By the way M. Lefueur related to me that he had remarked several cabins of the natives; that they were all situate on the humid banks of the salt marshes on the right bank of the river, and were of one same coarse structure; they were formed of small branches of trees stuck into the ground, fastened at their bent extremities above in form of an arbour, and exteriorly were coated with the liber, or bark; I have several times noticed; they were about three feet high, as many wide, and five or six feet long; in front of each of them were remains of fires, in the ashes of which were distinguished remnants of fish, kangaroos, and black swans' bills. M. Lefueur had taken a sketch of these cabins, from which I felt a persuasion that more wretched dens it would be impossible could be found,—I was nevertheless mistaken; we were yet far from having seen not only in what respected the dwellings, but also many other peculiarities, physical and social, of these shores, the utmost term of human ignorance and misery.

My companion further informed me that he had seen a number of holes dug some feet deep into the earth, which served as wells for the inhabitants. Near them commonly small tubes are found, formed from a few plants of wild celery that grows on different points of the bay. Of these, the use without doubt to which the inhabitants applied them, M. Lefueur availed himself to draw up some of the water; but he found it scarcely potable.

As we advanced, we distinguished a groupe of our companions making towards us: the party consisted of Captain Hamelin, part of the naturalists, and a major part of the crew of the long boat and the canoe: we learned from them that, the long boat being to leeward, and the wind blowing in shore, not admitting them to luff, part of the men were employed in towing it, while the remainder of the crew coasted the beach on shore. As the progress of the boat was slow, and the wind blew very cool, we determined, in the interval of its arrival, to kindle a large fire at the back of the downs.

All

All hands were employed for the purpose, and shortly an immense pile was in flames. Some of our party had killed different kinds of birds; these were speedily sacrificed for a common meal.

During the preparation of our dinner, Messrs. Depuch and L. Freycinet gave me an account of their excursion. "After vainly endeavouring," said Mr. Depuch, "to effect a landing on the left of the river we ascended, or rather the immense marsh we mistook for a river, which extends many leagues inland, and of which, though in the small boat, we with difficulty passed the bar at the mouth, after also finding ourselves in such shallow water by the time we had proceeded four or five miles as to be able to advance no farther, we determined to return, and for this purpose were on the point of making the right bank, along which we intended to walk, near a spot which we concluded was a small island, when piercing and repeated cries occasioned us to turn our eyes towards the forest on the opposite side, where we distinguished a number of savages, who apparently noticed us with curiosity: their cries were directed to us. Captain Hamelin steered towards them, but his course was soon impeded by want of water: in the mean time the natives continued to observe us, ran about in every direction over the shore, and reiterated their exclamations in a quicker and louder tone. With permission of the captain, accompanied by four of the naturalists, I jumped into the water, and readily forded the space between us and where we saw the natives: these fled to the forest; with one of our party, I followed their steps to its skirts, and the remainder kept at a distance behind us.

"Here we heard their exclamations repeated, apparently calling to each other, in a very quick manner: the only words I could distinguish, which were frequently repeated, were *veloo! veloo!* We likewise fancied we heard the barking of a dog; but shortly after it appeared to us they checked him, and the barking ceased.

"In order to make them comprehend we had no ill intentions, we deposited in the most conspicuous spots, glass beads, mirrors, knives, &c., and afterwards retreated, leaving various articles of this description purposely in the way. But shortly we distinguished seven or eight natives, each armed with two spears and a club, advancing with hasty steps, as if to cut off our retreat from the river. We were fortunate enough to prevent this design, but as they trod closely on our heels, we formed a junction with our party, and facing these audacious characters, without doubt strangers to our formidable arms, we kept them thus at a distance of about fifteen or eighteen paces. They brandished their spears with much strength, and threatened us; and hurled their clubs around with great rapidity, exclaiming in a frightful tone, *mouyc! mouyc!* By their gestures they seemed to invite our going away, and even to point out the road by which we came, and that, as we supposed, which communicated with the sea.

"In the mean time, pursued as we were by these ferocious men, we had not an instant to lose: we had no option but to fire or continue our retreat in good order; the latter we preferred, steadily resolved however to answer the first spear that should be lanced, by a discharge of small shot, and the next with ball; leaving them, as a counterpoise to the superiority of our arms, the advantage of a first attack.

"Ignorant of what might be the number of our assailants, and, especially, being satisfied it would be easy for another band to surround us, and cut off our retreat, we withdrew, facing them, walking backwards, and imitating them in their brutal cries and menacing gestures, with less violence, indeed, but in a manner which could leave them no doubt of our resolution to answer any attack by one still more destructive. In this manner we arrived without accident near the spot where we landed.

"We took to the river, the savages still close to us, and were in it up to our waist,



wait, uncertain whether in this particular spot it was fordable. Now it was the savages were nearest to us: our mulquets were all pointed, and our safety, long in a doubtful state, would have obliged us to have repulsed the attacks which indubitably would have taken place, when we perceived Captain Hamelin, followed by the crew of the boat, who, having landed on the other side of the island, was hastening to our succour.

"At sight of this reinforcement, the savages halted, and we availed ourselves of this to join our friends. We were now in front of them, and merely separated by the inlet which was every where fordable. To their continued exclamations of mouye! mouye! and their pointing to our road back, we replied by pointing to the presents we had left behind, and those we intended for them in addition, inviting them, by laying down our arms, to come and receive them, but in vain.

"Nevertheless one, who appeared to me the youngest of the party, and consequently the most hazardous, advanced to a third of the distance between us, and there, assuming a warlike attitude, with one spear and his club held behind him, and handling the other spear with all the strength and suppleness in his power, and marking in his looks the greatest boldness and disdain, he seemed to provoke, or rather did actually challenge us, with much energy, to single combat; the other savages, uneasy at first at this resolute conduct on his part, yet soon applauded it. We called out to him repeatedly, Taio! taio! He pronounced this word first to himself, as if inquisitive of its meaning, and afterwards repeated it to his companions, who likewise repeated it themselves with loud shouts of laughter. We afterwards cried out to them in several French words, which they pronounced in an inquisitive manner, and constantly with much exactitude, and with bursts of laughter. The words they uttered best were, oui, non, viens ici. Some one exclaimed, "Pöorah, get away," in the Malabar language, and this appeared less foreign to them than the rest. Still they did not advance; the challenger kept his post, and maintained his martial and disdainful air.

"Desirous of essaying our last means of conciliation, I advanced to the margin of the river, deposited my arms at a short distance, pointing them out to this native, who observed minutely all my actions. I next advanced, with the branch of a tree in each hand, to about half the distance between us, calling out Taio, taio, a word so well known to the inhabitants of the South Sea: I made him every sign I could think of to inspire confidence; but all was vain: the savage receded, but in the slightest degree, before me; and his comrades came forward to second him, threatening us anew. Our party now repeated their invitations and friendly signs, laid down their arms, which were replaced by green branches and white handkerchiefs: the perversity of this people was insurmountable. We again shewed them mirrors, beads, &c. and offered them as presents, making signs we were about to depart, and we actually retired. Curiosity induced two of them to cross the water, the one who had challenged us and another, highly remarkable from the deep red colour of his hair and beard: they both proceeded with precaution, picking up the articles left on the way, to wit, a mirror, and a handsome pocket handkerchief; the latter they laid down again immediately without appearing to set the least value on it. The red-haired savage it was who took up the mirror: surprized at seeing his own image in the glass, he turned it round suddenly, and finding nothing at the back, threw it down with an air of vexation, and seemed more enraged at us than ever; he had not threatened us with half the grace before, that is to say, with half the fury and vivacity he now exhibited. Captain Hamelin now shewed them a red tobacco-box: the sight of this occasioned a very visible emotion of surprise in these men, which was even expressed by a loud exclamation; he threw it towards the nearest of the two, and we receded, that they might take it up; this the  
savage



savage did, but immediately afterwards the exclamations and menacing gestures were reiterated in the same frantic manner.

"We were now on the same side of the river again as the savages, and all our endeavours to inspire them with confidence served only to encrease their audacity ; such was it, in short, that we had only to choose between a precipitate retreat or firing ; we chose the former, and hastened on board without experiencing any hindrance. Perhaps this was all they required ; perhaps, also, they were impatient to examine the rich presents we had made them.

"The savages we encountered were entirely naked, a cloak excepted, made of the skin of a dog or kangaroo, which was thrown over the shoulders of some of them, and a covering over the privities of others, with a sort of girdle round the loins. They seemed to me of a much less dark colour than the negroes of Africa ; their hair was short, even, straight, and smooth, their beard long and black, their teeth extremely white."

I have deemed it essential to repeat here the whole detail of M. Depuch, that the reader may judge of the determination of these people to avoid and even repulse strangers. We shall have further occasion to notice this characteristic, so opposite to the welcome and solicitude with which the nations of the Great Pacific Ocean received the Europeans who first visited them, and to the interest felt by the majority of savages at the first appearance of navigators on their shores.

Succeeds in the narrative of M. Peron, an account of the foundering of the long boat on the sands, and the difficulty experienced in regaining the ship, which, of minor interest, is past over, the relation being resumed from their return to the ship.

As soon as our boats returned on the 8th, we hastened to get them on board : we had not an instant to lose ; the swell of the sea was so great, and the ship pitched in such a manner that we had great difficulty in preventing our larger boat from being shivered against the vessel. At twenty minutes after ten we were under sail. The Naturaliste had the day before lost one of her anchors, and at the instant of weighing she lost again another. At half-past three in the morning we were off the cape, with the main-top sail close reefed. At this instant the winds blew in gusts ; a small rain fell, and the thick fog, by which we were surrounded, prevented our distinguishing any object about us. We now parted from the Naturaliste, which, being unable to keep so near the wind as our vessel, could not double the entrance of the bay. We ourselves indeed succeeded but with great risk, manœuvring, with dreadful weather, in from 12 to 20 fathoms water.

The tempest continued throughout the whole of the 9th ; the winds blew with violence, and drove us constantly towards the dangerous coast we were anxious to fly from : in one of the tacks, the ship not answering the helm, we were exposed to the most imminent danger.

The 10th we had sight of several large whales, sporting in midst of the angry waves ; one, that we saw at ten in the morning, was battling with a sword-fish, and the rage of the two combatants seemed to encrease with that of the tempest. \* This day at noon, we thought we discovered, by means of a flash of lightning, Cape Leuwin, which, if the object we saw, would have been nine miles from us towards the west. \* The barometer at this period had sunk to its lowest point ; it stood at 27<sup>p</sup> 7, 5<sup>l</sup> and, consequently, since the 5th June, had declined 10 lignes 9-tenths ; which corresponds well with the violence and duration of the tempest. At six in the evening, a rapid decrease of soundings, and the nature of the bottom, added to our alarms : we were running on the formidable reef called

called the Naturaliste, which we recognized on the 30th May. We had great difficulty in avoiding it, and to effect this we were obliged, spite of the violent gusts, and at the hazard of carrying away our masts, to hoist all the sail we could.

This horrible tempest continued from the 11th to the 16th without interruption; the sea was so violently agitated that we were frequently gunnel-under, and were incapable of keeping the deck; and many of our officers and men, and the commander even himself, had dreadful falls.

The 16th at noon we were in latitude  $32^{\circ} 42' 57''$  south, longitude  $111^{\circ} 46' 14''$  east of Paris. M. Mauge and myself availed ourselves of a moment of calm to drag along the coast again: it added to our treasures some new articles, among others a kind of sponge of a beautiful purple, from which a liquor of the same colour was obtained by the slightest pressure, and different substances stained with it completely resisted the action of the air, and even of several washings.

The 17th the sky was clear, the sea pleasant, and an agreeable breeze sprung up from the north-north-east: So many favouring circumstances held out the prospect of interesting operations; but a new chain of breakers, in the first instance, and afterwards a storm from the north-north-east, whence the winds blew, obliged us again to leave the coast. The part along which we sailed like all the rest was low, and without any remarkable inlet, but at the same time was not of equally sterile appearance with the bay of the Geographe; and beyond, we distinguished a range of hills higher, but almost as regular as the coast itself.

The 18th brought with it neither the fine weather nor the calm we needed; our ship seeming to be much strained, we resolved on bearing to the north; at two we made the island Rottneft, six to seven leagues distant: As this was the first rendezvous appointed by Captain Hamelin, we depended on anchoring here, either to receive or wait for intelligence respecting our consort, on whose fate we were not without inquietude, its slow sailing promising to render more great to her the dangers we had encountered in the bay of the Geographe. What then was our surprize and consternation universally, when, almost at the instant of our making that island, we heard our commander issue orders for making the bay of Sharks, in Endracht's Land. We then gave up all expectation of being joined by the Naturaliste during the remainder of the voyage; and our forebodings were but too exactly verified.

In the afternoon the winds varied from west to west-south-west; torrents of rain again began to fall, and the gusts that blew were violent, and frequently made us tremble for our masts; at eight in the evening the wind veered to the south-east; the rain fell in torrents; the lightning was almost unceasing, and the continued roar of thunder added to the horror of a night as dark as pitch. A more critical situation seemed impossible, till a truly real and imminent peril inspired us with additional alarm.

From twenty-five fathoms, with a sandy bottom, the soundings diminished suddenly to nine and a half and twelve, with a rocky bottom. The consternation was general; officers, naturalists, seamen,—every soul was on deck. Never were orders more simultaneously obeyed, never was greater zeal exhibited. Nothing short, indeed, could have enabled us to escape the dangers of every description with which we were threatened throughout this dreadful night.

The 19th, the sea continuing to run high and covered with foam, and the crew being exhausted with fatigue, the commander resolved to abandon these shocking seas, and bear away to a latitude nearer the equatorial regions, and consequently warmer, and less subject to tempests.

Thus

Thus terminated our first recognizance of Leuwin's Land, on which many observations remain for me to make ; but as we shall again revisit these shores, till that period I defer ulterior details respecting this part of the great Southern continent.

# CHAP. VI. — *Endraght's Land.*

[From 19th of June to 12th of July 1801.]

After making the isle Rottneest as I have before noticed, we bore away north-west-by-north, to avoid the Abrothos of Houttman, fearfully famous for the shipwreck of Pelfar, and the 22d June in the morning, had the first sight of Endraght's Land. This part of New Holland presents nearly the same aspect as Leuwin's Land, that is to say, a constant continuance of low coasts of nearly uniform level, sandy, sterile, reddish or grey, furrowed at its surface in different parts by ravines, almost perpendicular in every part, oftentimes shielded by reefs ; in short inaccessible, and perfectly justifying the epithet bestowed on it by M. Boullanger of Iron Coast.

The following days we coasted the great island Dirk Hartighs, an island still more bare than the coast of which it appears a continuance ; possessing the same physical character, it appears no less inaccessible, and the sea dashed with violence against the western shores along which we sailed.

Shortly after we discovered the isle Dorre, even more wild if possible than that of Dirk Hartighs ; doubling then, northward, a second barren island, which, after the general system of nomenclature of that part of the land of Endraght, M. L. Freycinct denominated the island Bernier, we found ourselves on the 26th June, in the evening, at the northern opening of the great bay of Sharks.

The next day, the 27th, we entered it, having the isles Dorre and Bernier on the right, and the continent on the left, the aspect of which, at this point, is equally inhospitable with the countries seen on the preceding days. In no part of it, in short, was any mountain to be distinguished, any traces of rivers, of rivulets even, or torrents ; in every part the coast consisted of a red or white sand, utterly destitute of verdure, other than that of dingy, stunted, and slender shrubs, dispersed at considerable distance one from the other.

The sea, on the contrary, appeared as if pleased with opposing in contrast to this frightful sterility, the most varied and numberless productions. We were on every side surrounded by large banks of salpa, doris, medusæ, beroës, and porpites, species of molluscæ and zoophites ; we have noticed in the 3d chapter, or shall have occasion to allude to : the prodigious number of these animals, their uniform and extraordinary shape, their beautiful colours, and the suppleness and celerity of their movements, were to all our companions, and especially to my friend Lefueur, my colleague Maugè, and myself, a spectacle which excited pleasure and admiration in extreme.

In midst of these innocent and graceful legions were distinguished a vast number of dangerous reptiles, which, gliding lightly over the surface of the waves, seemed in resolute pursuit of a heap of small clupeæ, which fled precipitately towards the open sea.

These marine serpents, which we shall frequently have occasion to mention, have hitherto been so imperfectly noticed by naturalists, and even by travellers, that it appears to me imperative I should be more particular in speaking of them. The whole of these sea-reptiles are distinguished from land serpents by their tail, which is flat and oar-shaped, and by their narrower body, which resembles that of an eel, and terminates below almost in an angle. They are of very various and sometimes extremely brilliant hue. Some have one uniform colour, such as grey, yellow, green, or bluish ; others

have rings of blue, white, red, green, black, &c. ; these again are marked with large spots, disposed with less or greater regularity, while those are distinguished by very small specks elegantly distributed over the body. One of these species is remarkable among the rest by the colour of its head, which is of a brilliant purple red : this is the red-headed sea-serpent of Dampier, who was the first that remarked it in these parts.— Like the land reptiles of this kind, some of them are perfectly innocent, others appear armed with venomous fangs : their length is various, from 30 to 40 centimeters\* to 3 and 4 meters†.

Their range is not only along the sea-shore ; we have noticed many at a distance of three or four hundred miles from any land ; but, what is most singular, we never saw any on the continent or on the islands : I certainly do not mean from this remark to draw the conclusion that they do not live on land ; but we saw none at any time ; and when speaking of animals so singular, an impartial observer should omit no important fact, even when he finds himself unable to conceive or explain its cause.

It is in midst of the hottest countries of the globe, in the Indian Ocean especially, the Persian Gulf, the Red Sea, and that which bathes the north-west and north of New Holland, that marine serpents are exclusively produced ; at least such is the result of my own observations, and the numerous researches I have made into the narratives of travellers : the high temperature of these seas, the calm they habitually enjoy, the multiplicity of animals which are generated in its bosom, and on which these serpents feed, appear to be the principal causes of their predilection for the equatorial seas.

On opening the stomach of several animals of this kind, I have found it chiefly filled with small and shell fish ; while they themselves in turn become the prey of numerous sharks, the movements of which are so inactive, so clumsy ; but more minute observations of one of the habitudes of these animals, as I saw more of them, shewed me the probable cause of this species of phenomenon. Oftentimes these serpents are seen asleep on the surface of the waves ; their faculties are then so completely absorbed, that our vessel passing by them, notwithstanding the noise it made, and the motion it gave to the surface, and notwithstanding the constant clamour of the sailors, failed to awake it from its somnolency. Without doubt, it is at these moments of lethargy the unwieldy sharks are enabled to seize these nimble animals ; at least, it appears to me difficult to account otherwise for their taking them. As to the cause of this deep sleep, it is not unlikely to be that species of stupor, which, as in many animals of the same family, is the accompaniment of digestion.

These reptiles swim and dive with equal facility ; oftentimes, when we reckoned to enclose them in the nets we threw, they disappeared ; and plunging to considerable depth beneath the waves, remained half an hour or longer without ascending again to the surface, or made their appearance at a very considerable distance from the spot where they sunk.

All these different habitudes, and this varying organization, uniting to distinguish pelagic serpents from terrestrial, I have deemed it proper to rank them as a separate family : still more particular reasons for this distinction will be seen in another part of my works.

While the minds of all were fixed on so many different objects, we discovered on a sudden a large number of whales, advancing towards us with that velocity of which these animals are capable. Never before had I contemplated such a sight. The multitude of these cetaceous animals, their colossal size, their rapid evolutions, the water spouted

\* 13 to 17 inches English.

† 10 to 13 feet, English measure.

from the two holes in their head, all this appeared to me less extraordinary, than to see these powerful leviathans of the deep throw themselves perpendicularly out of the water, support themselves, as it were, on the extremity of their tails, display their immense fins, fall back on the waves, and open, with their immense weight, a passage to the abyss below, in the midst of broken waves, and foam, and showers of spray. Now a numerous troop of them advanced on a single line, seemingly contending in suppleness and velocity : now, on the other hand, ranged in file, they swam deliberately, alternately diving beneath the surface and re-appearing. Oftentimes they were noticed to wheel away in pairs, with a mutual complacency, which made me suspect this the season of their loves.

In midst of these grand objects of admiration, the evening appeared to fall with speed unwonted, and when the entrance of night enforced us to cast anchor, our attention still was fixed on the disport of the whales.

However formidable these animals from their dimensions, the strength of their fins and their tail, and the rapidity with which they cut the waves, nature has yet opposed to them two rivals, and the terrible sword-fish on these shores wages with them an implacable and sanguinary warfare. This southern sword-fish materially differs from that of the north, in having two long fringes or bands of 25 to 30 centimeters long\* by a breadth of from 8 to 10 millimeters†, and which, placed by the sides of the sword, towards the middle, float freely in the water. Like that of the north, the southern sword-fish is susceptible of attaining a large size, and many of them appeared to me no less than 4 or 5 meters‡ in length. I have before mentioned, in the chapter which treats of Leuwin's Land, a combat of one of these animals with a whale; we were present again at a similar one in the Bay of Sharks. This took place close to our vessel in the night time, the moon then shining with splendor. The two adversaries seemed to fight with equal resolution. The whale, especially, made prodigious leaps, spouted up water almost uninterruptedly, and seemed exceedingly fatigued with the contest it had to maintain. The issue of the combat we were unable to learn, as the two champions insensibly got to a distance.

This extraordinary abundance of whales in the Bay of Sharks, cannot fail one day to render it of great importance, the fishing here presenting as much facility as advantage. Strangers to every species of attack from man, the whales of these regions, unalarmed at his presence, have not yet learned to dread his shafts; such indeed was their disregard of us, that we frequently were apprehensive of their striking against our boats, as they came to the surface to breathe, immediately close to their sides.

Fresh water, unfortunately, is generally, and altogether wanting in this part of Endraght's land, yet great as this disadvantage, it is not without remedy, for elsewhere we shall have occasion to shew that Captain Hamelin was enabled, with a single still, to obtain daily eighty pints of soft water, and thus supply a considerable part of those of his ship's crew who were on the continent. To our ship-owners, especially of the Isle of France, is it that this untried branch of industry promises benefit; and did not the nature of this work exclude detail on undertakings of this description, it would be easy for me to prove that there exists, perhaps, no kind of speculation more honourable or more certainly lucrative; but, to return to our navigation towards the interior of the bay.

The 28th of June we anchored opposite the Isle Bernier, on which next day I landed. It is of a narrow, elongated figure, scarcely fifteen miles long, by a breadth

\*  $9\frac{1}{2}$  to 13 inches Eng.

†  $\frac{3}{4}$  to  $\frac{4}{5}$  tenths of an inch Eng.

‡ 13 to 16 feet Eng.

of five or six. Its western coast, altogether exposed to the fury of the wind from sea is bristled with breakers, against which the waves dash with a frightful noise. In front of its northern extremity is the little islet, Koks (Cox), a wild rock joined to the main nearly by a chain of reefs. All the eastern side is indented and craggy; but here the waves break with less impetuosity than in the west; on which account it is easy enough to land from the little creeks.

The sand of the shore is quartz mixed with a large portion of calcareous ruins much attenuated. The substance of the island even is composed, in its inferior beds, of a calcareous shelly freestone, sometimes whitish, sometimes red, deposited in horizontal layers, the thickness of which varies from two to three decimeters \*, and which, being extremely uniform in their projection, offer for mason's work stones already half prepared by nature.

The shells encrusted in the mass of these rocks, are almost all of them univalve; they belong most particularly to the genus *naticæ* of M. De Lamarck, and have great affinity to the species of *naticæ* found alive at the foot of these rocks: they, doubtless, have been petrified many ages back, for, separate from their being exceedingly difficult to extract from the stone, in consequence of their close adhesion, they are observed at the depth of more than 50 meters † below the present level of the sea.

However great the regularity of these layers in general, they are yet not all of them homogeneous in their substance; there is in particular a variety of species of these rocks more remarkable in their structure. These are aggregated calcareous pebbles (*filiculi*), in sandy, ochrous earth, which adheres to them with such tenacity, that the gangue is not to be separated from the pebbles but by breaking both. All these pebbles are of globular form, and are composed of a great number of concentric zones which surround a kernel consisting of a hard and brownish freestone that yields sparks. The different strata round the kernel are but a few millimeters in thickness, and have different colours, from a deep red to a bright yellow. The general disposition of this breccia gives it a coarse resemblance to the globular granite of the island of Corsica, while, by its ribbony and concentric beds, it has somewhat the appearance of the *agathes-onyx*. It is moreover susceptible of polish, and might be rendered subservient to different objects of service, or even of luxury,

The beds of freestone of different kinds constitute, to speak properly, the entire of this country, but on the rocks themselves is imposed a stratum of sand of less or greater depth, which is spread over the whole island, rising near its edges into a sort of girdle of very moveable downs, from 20 to 26 meters ‡ high. This sand, similar to that of the shore, is very calcareous, of an extreme fine grain, which should seem to render it liable to be readily dispersed by the winds, and consequently to cause the face of the island to be changed according to their caprice and violence. We shall speedily see the counteraction of nature to prevent disorders of this kind.

The mineralogical account I have sketched of the island Bernier applies in the most precise manner to the islands Dorre and Dirk-Hartighs; what I am about to say of the animal and vegetable productions of this island is also equally applicable to the others. Under this point of view, its history in general becomes more interesting, and is deserving that detail which I have deemed just to give of all its constituent parts. Let us only add to these primary considerations, that in no part whatever are any sources of spring water to be found, or any trace of constant moisture.

On such a soil it is of ready conjecture vegetation can but be wretched, and in a

\* 7½ to 12 inches Eng.

† 163 feet Eng.

‡ 65 to 84 feet Eng.

languishing state ; still it is not so absolutely negative as might at first be suspected. In fact, there are found here a tolerable variety of small trees and shrubs, among which is a kind of fig-tree, the fruit insipid to the taste, and scarcely so large as a walnut ; two or three species of small mimosæ, with pleasing and odoriferous flowers, a small melaleuca, some atriplices, a rumex, &c. ; but, of its vegetable productions there are three on which a greater stress appears to me requisite to be laid, as the history of these is combined closely to that of the soil.

The first of these plants is a species of spinifex, or was at least esteemed to be so by our botanists : it grows in the most arid places, forms a sort of turf sometimes of pretty large extent, which is naturally spread in a thousand pleasing forms, presenting here long and regular alleys, there a number of small wavy paths, here again a variety of figures more or less extraordinary, counterfeiting in short the most picturesque and varied parterres. This singular plant is composed of an infinite number of leaves, capillary, radical, sessile, stiff, and so sharp that it is impossible to touch any of these verdant brambles without being pierced by a thousand little darts, which remain in the skin, and occasion the most vexatious pain. The prodigious tenuity of these leaves, or rather these thorns, render them susceptible of a decomposition as rapid as complete ; and this plant must be regarded as the essential source of that small quantity of vegetable earth which is found in some parts of the island.

The second species of plants which on these shores is worthy of notice for its extraordinary character, is a mimosa, whose knotty and stunted trunk scarcely rises to the height of 7 to 10 decimeters \* above the soil, but which furnishes a variety of branches from 5 to 7 meters † long, horizontally spread at a small height from the ground, and so tufty and interwoven, that the small animals which come to seek for shelter in its shade, are obliged, as we shall shortly describe, to work themselves a covered way through the inextricable labyrinth of branches, leaves, and boughs.

While, by means thus singular, the vegetable bed gains growth, while the plants, fade on the surface of the earth to brave with more impunity the fury of the tempest, and to concentrate in some measure the rains and dews beneath their shade, the moving downs of sand are found enchained and fastened to their appointment by an immensely wide-spread net of living and natural cords. There are stoloniferous § roots of a large species of cyperus, the hard and brittle stem of which rises from 7 to 10 decimeters || above the soil, and terminates in a globular ear of the size of the fist, and in every part bristling with a long beard. This species of gramen, which we shall have occasion again to remark on different points of New Holland, is the more interesting, from its yielding a farinaceous grain like that of wheat ; but, unfortunately, almost all the flowers of it are barren, so that oftentimes it happens, that scarcely two or three grains are collected from the bulky ear. Possibly these abortions might cease were the plant to be cultivated in a less arid soil ; but without pausing on a matter so doubtful, let us be content with noticing that the acquisition of this cord-rooted gramen might not be without its utility in Europe ; and assuredly, it would be a circumstance not a little remarkable if the devastating sands of the neighbourhood of Cadiz should ultimately be chained with fetters brought from the barren shores of the Australasian continent. \* M. Riedlé had

\* 27 to 39 inches English.

† 15½ to 23 feet.

§ From εὐλος, abundance, sent out from any thing or place : perhaps in the new coinage of words, one of more happy choice for the expression it is to convey, was never sent from the mint of France. Tr.

|| 27 to 39 inches English.



formed this useful plan; but death selected this estimable and laborious character for his first victim, and many similar designs died with their benevolent author.

There are no inhabitants of the human species on this island, nor any convincing proof of their ever making it a place of residence, or casual resort.

The only animal of the mammiferous kind is the striped kangaroo\*, the smallest and most elegant species of this extraordinary genus of animals peculiar to New Holland: it is most particularly characterized by the conic form of its body, the disproportion of its legs, the pocket in front in which it carries its young, &c.

The species in question is immediately distinguished from the others of its genus hitherto known, by twelve or fifteen transverse stripes across its back, of a slightly brownish red, less regular, and less distinct at the upper part of the shoulders where they begin, and increasing gradually in deepness of colour and appearance towards the tail, at the base of which they terminate. These stripes are lost on the sides, and have no existence on the belly; the face of the animal and the feet are of a lightish yellow, the abdomen marked by grey but whitish, the rest of its body of a hare grey, varying its shade in different animals: the ears of this species are shorter in proportion to the size of it than in any other of its genus; the same may be said of its tail, which is likewise weaker, and which, entirely bare of hair, has much similitude to that of a rat. As to other matters, its form is similarly cone-shaped, the disproportion between its fore and hind legs is the same, as is the distribution of its toes, nails, &c. All these details, however, which will be given in the zoologic part of our works, are foreign to this narrative: it is sufficient I have described the prominent characteristics of this pretty animal.

The striped kangaroo peoples with its herds the three islands of Bernier, Dorre, and Dirk-Hartighs; but of this species we found none in any part of the continent, or in any of the islands which we surveyed in succession. The same phenomenon will hereafter be seen with respect to all the various species of kangaroos; that is to say, that each species will be seen to exist on such and such islands, or on particular portions of land, without any one of them appearing beyond the limits peculiar to its species.

Destitute of every means of attack or defence, like all other feeble animals, and especially like the hare of our climates, the kangaroo is timid, and gentle in extreme. It is alarmed at the slightest noise; a breath of wind will even make it fly. Hence, notwithstanding their numbers on the island Bernier, we found it at first extremely difficult to take them. Within the impenetrable thickets I have described, these animals could brave the activity of our hunters with impunity; and, when they left them, issued by some unknown inlet, and bounded with the utmost speed to another favouring covert, without the hunters being able to conceive how it was possible they could penetrate and disappear so promptly in these mazy shelters; but soon they discovered that each of these little thickets had several covered ways terminating at the centre, and leaving them a choice of issue as circumstances required. No sooner known was this circumstance than their destruction was assured; our sportsmen united, and while some beat the thicket, others placed themselves at the several entries, so that the animal, a prey to superior guile, on seeking to escape, presented itself to almost inevitable destruction. The flesh of this animal appeared to us, as it had done to Dampier, much like that of a warren-rabbit, but far more aromatic, a consequence, no doubt, of its aliment, which is plants, almost generally odoriferous. It is most assuredly the best meat we met with

\* *Kangurus fasciatus*. N.

from the kangaroo, and the acquisition of this species would be a real benefit to Europe.

At the time we were on these shores all the females that were full-grown had in their pocket a young one of tolerable size, which they endeavoured to protect with truly admirable courage; were they wounded they fled, carrying their young in this pocket, and never abandoning it, until overcome with fatigue, and exhausted with loss of blood, they could support its weight no longer; then they stopped, helped the young one out of the bag, and pointed out to it the spot where it had the greatest promise of security: they then continued their flight with what celerity they could; did it happen the hunter gave over the chase, or slackened his pursuit, the wounded mother returned to the thicket which had given its offspring an asylum, called it by a species of grunting, caressed it with affection, as if to dissipate its fears, made it re-enter the pocket, and sought, with this precious burthen, some new shelter where the hunter might not be able to discover it, or force it from its retreat. Similar were the marks of intelligence and affection these poor mothers exhibited when they felt themselves mortally hurt: their whole care was lavished on their young; far from seeking to escape the huntsman, they suddenly stopped, and their last efforts were expended in the preservation of their young. — Generous self-devotion, of which the history of animals presents so many examples! and which the human species is so often reduced to envy.

During our stay on Isle Bernier we caught a number of these young animals; but the major part, as yet no doubt too weak, did not long survive their captivity. One only remained of these and became tame; this animal ate bread with pleasure, and seemed to relish exceedingly the sugared water we gave it. The last taste is the more extraordinary, as on the islands which these animals inhabit there is not any soft water to be found. This young kangaroo was accidentally killed at Timor: we felt its loss the less sensibly, as, having but one of the species, we could not hope to naturalize it in Europe; this first attempt, however, proves clearly that the species in question might easily be tamed, and I again repeat, would be a most valuable acquisition to our parks and yards.

If a few troublesome or injurious animals be excepted, which we shall notice, all are rare on the unhappy soil of which we treat; the class of birds, for example, is confined to wretched cormorants, divers kinds of boobies, petrels, lari, sea eagles, and ostralegæ\*, which far from man and his shafts, multiply their voracious flights on these unproductive rocks. The land-birds are the fly-catchers, the speckled magpie, and a beautiful species of titmouse, with a blue collar, which will, as it deserves, be further noticed.

The reptiles consisted of a species of lizard†, one of the largest of that genus, and the very short and large tail of which makes the animal appear at first sight with two heads; a beautiful species of tubinambis‡ 12 to 16 decimeters long §; a gecko|| of from 10 to 13 centimeters¶. The history of these species, all of which are new, will be presented with the corresponding details in the zoological picture of New Holland.

Perhaps no country in the world abounds more in fish than the great Bay of Sharks; but this abundance is unknown off the shores of the Isle Bernier. In the bosom of the neighbouring havens it is that these animals go to seek the calm and aliment they

\* Oyster-catchers.

§ 4 to 5 feet English.

† *Scincus tropicurus*. N.

|| *Gecko Dorrceus*. N.

‡ *T. Endrachtensis*

¶ 4 to 4½ inches English.

require; we shall mention them at a future occasion. Here all that is necessary to say is, that our fishing was almost wholly fruitless, our collections in this department not having been enriched here by more than ten new species.

In midst of the sea-boat-rocks of the island Bernier, inhabit different species of polypi, some of which attain extraordinary size; many that I saw were from 9 to 13 decimeters long\*, when their arms were extended.

In testaceous animals, properly speaking, these seas were more abundant; but, if muscles and oysters be excepted, which delight in rocks and angry waves, all of them were univalve. In the bottom of the bay, buried in the mud and sand, numerous and magnificent bivalve animals abound. We shall at a future period tear them from their peaceful beds, but, not to anticipate the natural order of the relation, we shall content ourselves with indicating here some of the most remarkable shell-fish collected at the isle Bernier.

Of all the species of muscles hitherto known, that which I have discovered here is incontestibly the most handsome and splendid: stripped of its marine coat, it reflects all the most vivid colours of the prism and precious stones; it is even dazzling. I have described it under the head *Mytilus effulgens*.

From other causes the oyster of these parts deserves particular attention; its inferior valve is a species of greatly lengthened cone, 16 to 19 centimeters † long; and more or less regular. Fixed on the rock by its point and one of its sides, it is covered by a second valve, which much resembles the same piece of our oyster, and which serves as a cover to the lower shell I shall next describe: the whole depth of the lower shell is not filled by the animal; it is found placed in the upper part of the cone, the lower part of which is occupied by a number of transversal divisions, much similar to the glasses of a watch, and which are continued to the extremity of the point which serves as a support to the shell. Their concave sides are turned upwards, and between them are vacant spaces filled with an aeriform fluid, the nature of which it would have been worth determining. However singular this oyster-shell, its inhabitant was not the less delicate, for all united in praise of its excellence.

Among the univalve conchology peculiar to this part of Endraght's land, I must not omit to point out a beautiful species of trochus §, of the most deep and lively green; a species of patella which, owing to its size, I denominated *gigantia*; a magnificent volute ||, sprinkled with white spots, representing so many flocks of snow, and above all a cone or rouleau ¶, about 45 millimeters\*\* long, of a light orange colour, and distinguished by a band three lines broad, which follows the windings of the spiral, and which, in a shell newly taken from the water, is of a splendid blue like the lapis lazuli. Two species of terrestrial shells in astonishing abundance cover large spaces in the interior of the island, but all of them uninhabited; one was a species of helix, the other belonged to the genus bulime of M. Lamarck.

The family of crustaceæ counts no great number of species on these shores, but of these are two of the genus Portune of M. Latrelle ††, which cover the rocks in myriads. Some of these crabs are but four or five inches long, and the flesh of them is excellent; on occasion they would furnish a food equally inexhaustible and salutary.

Insects in general are not numerous on this island, if ants alone be excepted; of these the number of species is five or six, and their legions are innumerable. After

\* 3 to 4 feet English.

§ *Trochus smaragdinus*. N.

\*\* 1½ inch English.

† *Ostrea schyphophilla*. N. ‡ 6 to 7½ inches English.

|| *Voluta Nivosa*. N. ¶ *Conus dorreensis*. N.

†† *Portunus pleuracanthus* et *P. Euchromus*. N.

the ants come blattæ or kannerelæ, one species of which attains considerable size. Of grasshoppers, crickets, &c. we distinguished some curious species. I must under this head observe, that the family orthopteres, which commonly prefer arid and dry situations, present a great number of species on the continent of New Holland, and that each of them appear to have singularly multiplied. More than on one occasion will it occur to us to remark the interesting affinity of the nature of the soil with its various productions.

In midst of the indented rocks I have described live many echini, which are sometimes very difficult of separation from the calcareous rock, to which they seem encrusted. In the same spots dwell several species of sea stars of the genus ophiura; one of these \* is remarkable for its long arms of from eight to ten inches, articulated, fragile, and bristled with small thorns. From its retreat between the chinks of the rocks this animal stretches to a distance its long tentaculæ, and uses much dexterity in seizing its prey, and dragging it to its little cave. A second species of ophiura† shone during the night like a beautiful star, by means of five glands or tubercles placed on its disk.

In the class of solid zoophytes, besides some species of milliporæ, is a branching madrepore from six to seven inches high, the extremity of which is distinguished, when in a fresh state, by an extreme lively and pure rose colour.

From all the observations I have presented in the zoology of the island Bernier, and the sea which it is beaten, there results that the terrestrial animals are few, and, except the kangaroo, all of them either troublesome or injurious; that the sea on the contrary is remarkably fecund, and that from the bulky whale to the microscopic polypus, the whole of the classes of the animal reign have numerous and interesting families; and when, in another part of this relation, we shall have indicated the various productions of the great gulf at the entrance of which we now halt, it will without doubt be granted, that few seas have been more lavishly endowed by nature than the sea which bound their shores.

M. Peron here describes the dangers he ran in his researches on the island, from losing his way, and from falling asleep where a boat was sent to bring him on board: he commemorates likewise the kindness and affection of Lieutenant Péquet, who even ventured to disobey his orders, by continuing his search beyond the time by which, if he should not find him, he was ordered to return, and leave him behind. This narrative, as of inferior interest, is passed to resume the thread of the relation.

In the mean time the Naturalist not making its appearance, our commander resolved on proceeding farther into the Bay of Sharks in search of it, and there to await its arrival. In this view we weighed anchor on the 30th of June. We made but little way during the day, throughout the whole of which we steered amidst immense shoals of fish, of which, as we sailed along, we caught great numbers. All the species were new, and belonged to the genera labræ, balistæ, cones, ostracions, chetodonæ, &c. The whole evening also we distinguished an enormous quantity of whales, many of which came very near to our ship. We likewise saw many sea-serpents five or six feet in length.

At length, on the 2d July, we anchored in Dampier's Bay, on the north of a point of land, which, like the previous navigators, we considered an island, but which M. L. Freycinet, as will hereafter appear, found to be a considerable peninsula. Scarcely were we anchored, before the sky was involved in big clouds, and on the

\* Ophiura telactes. N.

† Ophiura phosphoria. N.

succeeding day, the 3d, we were assailed by so violent a storm, that we were obliged to weigh anchor precipitately, to make for the north, where we had proceeded the day before. This hurricane caused us to run great hazards the whole of the night between the 3d and 4th; as, to avoid the western isles, we threw ourselves among the numerous banks of the eastern coast, between which we were constrained to luff up until day-light. In one tack, by the vessel not answering the helm, we were on the point of striking on the point of the high banks, which forms the northern boundary of Dampier's bay.

Fortunately this storm was as short of duration as it was violent; and the next day, 4th of July, finding ourselves opposite to the isle Bernier, our commander again cast anchor, determined to await there the junction of the *Naturaliste*, which we expected daily to take place. In consequence of this resolution, two tents were erected on the back of the downs, designed, one for the naturalists and the astronomer, the other for the commander himself.

On the 6th at day-break, I proceeded towards the western coast of the island, which, more sheltered from the fury of the winds, seemed to promise a numerous and important collection, nor was I in this point deceived; but, as if the isle Bernier was destined to be constantly fatal to me, I ran the greatest possible risk of being buried in the waves. After having traversed the sea-shore for a long time, without being able to find the beautiful species of trochæ, patellæ, cones, and volutes, I have before described, other than dead, I resolved to pass a dangerous reef which projected into the sea, in the sinuosities of which I hoped to meet with living shell-fish. There were there abundance of these indeed, but while most intent on disengaging them from the rock, a big wave struck with such force over the ridge of the reef, as to bear me with it against the rocks contiguous: my cloaths in an instant were torn to pieces, and I was covered with wounds and blood. I collected myself notwithstanding, and exerting all my strength, clung firmly to a point of the rock, and thus avoided being borne away by the returning wave, which without doubt would have been my destruction. Leaving now the sea, I dragged myself along to the shore, which I had no sooner gained, than I fainted from pain and loss of blood. In this state I remained till night, without power to resume my way to the tents. My right knee especially was so painful, and so much cut, that it seemed to me impossible I should be able to walk; but gradually the pain abated, and I plucked up courage; a large fire, which I distinguished on the summit of a down of sand, served to direct my steps, and by midnight I rejoined my companions.

Seeing me covered with contusions and wounds, and bathed in blood, many of my friends were affected to tears, and even the commander himself seemed to feel for my deplorable situation. I was shortly after attacked with fever, pretty strong at first, but the chief of my wounds turning out to be of little consequence, I was soon in condition, if not to resume my excursions, yet to make a curious series of observations and experiments on the relative temperature of the atmosphere, and the interior of the earth, at different hours of the day and night. The result will with additional interest appear in speaking of the inhabitants of Endraght's land and their singular dwellings.

In the mean time all our labours advanced towards their close; the astronomer had determined by numerous observations the position of the islands on which we were encamped; Messrs. Boullanger and Mauronard, in a long and tiresome excursion, had surveyed the entire eastern coast; and by one of my colleagues and myself the whole of the productions of the soil had been collected. Nothing therefore detained us longer on these shores but the *Naturaliste*, and still this ship did not make its appearance; it was requisite at length we should give up expecting her; and the 12th July, in the morning,

morning, we weighed anchor to pursue our examination northward of Endraght's land.

On the same day we doubled a large cape which forms the north-east point of the bay of Sharks, and which has the appearance of an enormous bastion; we called it Cape Cuvier in memory of a learned naturalist of that name.

In the night, between the 14th and 15th of July, we passed the tropic of Capricorn for the fourth time; the thermometer was from  $16^{\circ}$  to  $18^{\circ}$  \*, the barometer from  $28^{\circ} 1'$  to  $28^{\circ} 3'$ . The portion of land we coasted, like the rest of these unpleasing shores, was naked, sterile, low, uniform, sandy, and wettilsh. The 15th, at noon, we were in latitude  $22^{\circ} 17'$  south,  $110^{\circ} 46'$  east of Paris.

From the 18th to the 22d we had sight of the river King William, which in no respect is deserving of the importance that, from the ancient charts of this part of New Holland, one would feel inclined to give it. The opening of it is narrow, barred by reefs, and embarrassed by rocks; and the direction it seems to affect inclines me to imagine that, like all the other pretended rivers of this continent, it is only a sort of channel by which the waters of the sea penetrate a greater or less depth in land. Moreover, at its mouth, no sensible difference is observed in the colour of the waves; in crossing it no current is experienced; and the continent in this part presents the same picture of barrenness and monotony to which I have had so often to advert.

The same may be said of the north-west cape of New Holland, which we descried the 22d July and which we denominated Cape Murat. In front of this important cape a pretty extensive reef is projected, against which the sea breaks with violence. On the north, and, as it were, on the same line, seven sandy, low, and barren islands present themselves, called the Islands Rivoli, in memory of the celebrated victory of that name. These islands are inconsiderable, the largest of them not exceeding three leagues in length; but they are very easy for navigators to reconnoitre, and their position in front of Cape Murat renders them of importance.

Immediately beyond the cape, and the islands I have just described, begins De Witt's Land, a new theatre of troubles and perils which we are about to pourtray in the succeeding chapter.

#### CHAP. VII. — *De Witt's Land.*

[From the 23d July to the 16th August 1801.]

UNDER the name of De Witt's Land is generally comprized all that part of New Holland which, from the north-west cape extends to the north cape of this vast continent, thus comprizing ten degrees nearly of latitude by fifteen of longitude. It was discovered, according to common opinion, by William de Witt, a Dutch navigator, who gave it his name; but the epoch of this discovery is uncertain; some state it to have taken place in 1616, others in 1623, or even 1628. In this last year also it is that Vianen is reputed to have been wrecked on this coast. In 1669 Dampier appeared off these shores; but repulsed by similar obstacles, which will be seen to have multiplied themselves around us, he was obliged to abandon them. At length, in 1705, three Dutch ships were expedited from Timor to reconnoitre De Witt's Land, and that of Van Diemen on the north; but this last voyage never having been published, all circumstances relating to it remain unknown; it appears, however, that to this last under-

$60\frac{1}{2}^{\circ}$  to  $64\frac{3}{4}^{\circ}$  of Fahrenheit.

5 1 2

taking

taking are owing the details, exceedingly inexact, from which this part of New Holland is laid down in the common maps. From that epoch a century has elapsed without any European ship having been seen in these seas, and shortly it will appear that it was not without reason that navigators have kept at a distance from these dangerous shores.

The 23d July we passed within sight of a low and barren island, about three leagues in length, called Hermit Island, from the brave officer in the navy of that name.

From the 23d to the 25th we had flagging winds and dead calms, which did not admit of our making much progress, and the currents carried us far enough from the shore to prevent our having sight of it. The temperature of the sea at its surface was then 20° of Reaumur\*, and multiplication went on rapidly in its bosom. Independent, in fact, of a prodigious number of medusæ, salpæ, porpites, &c. we were surrounded by fish of different kinds, especially balistæ, chætodons, clupeæ, &c. which must be placed at the head of equatorial fish. Large sharks were seen at every instant about the ship, and every where whales and turtles in profusion. We likewise distinguished two new species of sea-serpents, the one from eight to ten feet (English) in length, of a green colour, spotted with red and brown; the other, from three to four feet long, of a duller green, was distinguished by large yellow and black scales on its back.

The 27th, we had sight of a small archipelago, which we called Forestier's Archipelago, in honour of the chief of the first division of the ministry of marine. These islands, which we afterwards examined with greater exactitude, are at a short distance from those of Rosemary, and the Archipelago of Dampier. We reckoned six principal ones, the largest but from three to four leagues in length: they appear to be generally low and sterile, like those of Rivoli; one of them, however, designated the Island Depuch, and which lays in latitude 20° 35' 30" south, longitude 115° 12' 50" east of Paris, presented itself under such a particular appearance, that the commander thought right to examine it with greater nicety. For this purpose M. Ronfard set off in the long boat. Vainly did the naturalists request to be put on shore, not one could obtain this permission. M. Ronfard returned by ten the next morning; he related that Depuch Island was only from four to five miles long; that a boat can readily land; and that from different marks of the tides upon the rocks, the greatest difference of high and low water appeared to be 26 feet (English).

By the mere appearance of this island we could discover that its character and nature were different from all we had hitherto seen. In fact, the land was higher, the figure of it more marked, and proportionately as we advanced this difference became more evident. Instead of those uniform coasts presenting no point, no eminence whatever, on this island were seen pointed and solitary rocks, which like so many needles seemed to start from the surface. The whole island was volcanic, prisms of basalt, generally pentædra, heaped one upon the other, and most commonly lying on their angles, constituted its entire mass. There they arose like walls of hewn stone; here they presented themselves in form of a pavement, similar to the Giant's Causeway, so much renowned. In some parts, excavations were seen, of various depths; here the water, which ran from neighbouring parts, uniting, formed a kind of fountains, in which our seamen met with some excellent water of ferruginous nature. In these spots, more moist than others, vegetation was rather active, and about them grew some handsome shrubs, with trees of higher size, which formed very pleasing groves; the rest of the island, with a different disposition, presented likewise as different a perspective:

\* 68° of Fahrenheit.



among these heaps of lava, piled in the rudest disorder, a general sterility reigns; and the black colour of the volcanized rocks added to the mournful and monotonous aspect of the little island. Walking is attended with difficulty on account of the basaltic prisms which, horizontally disposed, present their angular and salient edges vertically. "The colour of this basalt," says my interesting friend Depuch, who possessed different specimens of it, "is grey, inclining to blue; its texture is very close, its grain fine, and in appearance like petro-felix; brilliant lamina, irregularly disposed, are disseminated throughout the whole mass; without acids it does not effervesce, nor does it sensibly answer the magnet; its exterior has suffered some change, produced by ferruginous particles: this decomposition does not commonly extend to a greater depth than a line or two."

M. Ronfard imagines there is ground for conjecture, from the general conformation and colour of the neighbouring portion of the continent, that it is of similar volcanic nature. This would, without doubt, have been an object of the more consequence to verify, from nothing volcanic in New Holland having hitherto been noticed, and from our having, until this instant, met with nothing of this kind; but our commander, without any concern for a phenomenon which yet has important relation to the geography of this part of New Holland, ordered the continuance of our course.

Depuch Island is the most eastern of the cluster that forms the archipelago of Forrestier, and is one of the smallest, but its volcanic constitution gives it a prominent character. It is not commonly inhabited; but the savages from the main land may possibly visit it occasionally, as M. Ronfard found traces of fires formerly kindled on the ground, and fractures of basalt recently effected, which appeared to be the result of human exertion. Only one quadruped was seen, which at a distance appeared to be a dog; a conjecture rendered more probable from that species being spread over every point of the neighbouring continent. One of our sailors, indeed, thought he distinguished a kangaroo, of a small species. The only birds were some fly-catchers, and sea-fowl. A grey serpent was brought thence, six feet long, of the genus *boa*. Insects were numerous, of the genera ant, grasshopper and cricket, and especially a small kind of fly, which from its swarms was singularly troublesome to our people. Among the shell-fish must be noticed a beautiful species of *pyrulæ*\*, elegantly adorned with small aurora-coloured spots.

Behind the archipelago of Forrestier the continent seemed to be deeply indented; the bay between the lands we termed Forrestier Bay. The 28th July, at five in the evening, we discovered a pretty extensive bank, which we had much difficulty to avoid: the sea broke against it with violence, and the soundings diminished so rapidly, as we approached it, that in a few instants they gave less than eight fathoms. We called this bank the Shoal of the Geographe.

The same day we had sight of land at different points: the points appeared to us even less elevated than those observed the day before; and, notwithstanding we were only in ten fathoms water, scarcely could we perceive them from the deck. We, however, at intervals of space distinguished several large columns of smoke, which satisfied us of the presence of man on these melancholy shores.

The 30th, in 19° 33' south, longitude 116° 31' 45" east of Paris, we discovered a low and sandy island, which we called *Ile Bedout*, in honour of the brave officer of that name, who on board *Le Tigre* supported one of the most glorious combats the French navy can boast.

The 31st we again had sight of land, which however, on account of the shallow water, we were obliged to make from. It perfectly resembled that of the day before, and was scarcely apparent as a thin blue line on the surface of the sea: here also we distinguished smoke.

The 1st August we experienced a pretty violent storm, during which I had occasion to observe medusæ of prodigious dimensions; the majority were not less than two feet and a half (English) in diameter, and weighed from fifty to sixty pounds. Many species of the same genus furnished us with observations valuable for the history of the phosphorescence of the sea.

At this period, we were in  $18^{\circ}$  of south latitude, and consequently within the equatorial regions; still the temperature we experienced in these seas scarcely exceeded from  $14^{\circ}$  to  $17^{\circ}$  of Reaumur\*, which gives a mean inferior to that we had experienced in a corresponding northern latitude. The barometer, on the other hand, kept at  $28^{\circ} 2'$  to  $28^{\circ} 3'$ , giving a mean much higher than was observed in corresponding latitudes on the other side of the line.

On this occasion also we confirmed by experiment a valuable remark of Dampier on the atmospheric variations of these climates: pretty strong winds prevailed from midnight till six in the morning, blew with violence during part of the day, began to fall towards evening, and till towards midnight degenerated into a perfect calm. These singular circumstances, attendant on the meteorology of these seas, add greatly to the danger of reconnoitring the land, at least in the season of the year we were there.

Similar is the character of constant serenity in the atmosphere of these regions. Never, in fact, did the heavens appear to us more clear, or less loaded with vapours and moisture. Nor had this phenomenon escaped the celebrated navigator I have just noticed. "Ever since our departure from the Bay of Sharks," says Dampier, "we constantly had fine weather, nor was it hasty to leave us; the sky was serene, and not a single cloud was visible." I merely point out these meteorological observations in this place; in another, we shall see them identified in a curious manner with the physical history of the great continent of New Holland.

The 3d of August, we sailed all day in a very shallow water, without, however, seeing land even by night-fall, which induced our captain to pursue his course towards it; but at ten o'clock, the appearance of a great fire on the coast gave us notice of the imminent danger we hazarded. We immediately tacked, and laid by for the night.

The 4th we were constantly in sight of land, but were obliged to keep at considerable distance from it on account of the shallowness of the water; oftentimes, in fact, the lead gave but eight, seven, six, and even five fathoms, which at length obliged us to anchor. The land we had in sight, although generally low, uniform, sandy, and whitish, seemed notwithstanding rather less sterile than any which we had hitherto examined, and the back of the downs was pleasingly marked by a curtain of verdure and shrubs. Proportionate to the superior fertility of these more favoured shores, apparently, was their greater population, at least if a judgment of it could be formed from the multiplicity of fires kindled on the coast, which, from their extent, presented the appearance of a forest on fire. The coast in this part, as we shall presently see, forms a large bay which we called Laplace Gulf, from the illustrious learned man of that name, to whom physics and astronomy are indebted for so many useful and valuable discoveries.

The 5th, we discovered a new groupe of small islands, sandy, but covered with some verdure; we called them Lacepede Islands. These islands, of which we shall have to speak further in another place, consist of four principal ones, situate at but little distance from the continent; the largest is three leagues in length: they spread from north to south, on a line nearly twelve leagues in extent. The position of the ship at noon was  $16^{\circ} 43' 30''$  south, longitude  $149^{\circ} 33' 30''$  east. In front of Lacepede Islands, projects a very long chain of reefs, and immense banks of sand which we denominated the Banks of Whales, on account of the vast number of these animals we saw. We likewise perceived all day long large shoals of molluscæ; a number of fish and many sea-serpents. Our collection was increased by several species of each of these classes of animals.

North of Lacepede Islands, appeared a large whitish cape named by us Cape Borda, from the learned geometrician of that name, who, by perfecting the reflecting circle, has just claim on the gratitude of navigators of all countries. Cape Borda lies in  $16^{\circ} 36'$  S., long.  $120^{\circ} 8'$  E. of Paris.

The 7th August we found ourselves at very little distance from the shore; it appeared to us extremely low, sterile, and sandy: the land forms here a small bay of tolerable depth, which we termed Berthoud Bay, from the commendable artist to whom the navy (of France) owes its best chronometers.

The north point of this bay is formed by a very large cape, called by us Cape Mollien: here the coast suddenly takes a direction more towards the east.

In front of Cape Mollien a small island is seen, and with it several banks of sand, which we distinguished very near us on the 8th; the Isle and Banks of the Geographe is the designation we gave them, from the name of the ship destined to publish the discovery of them to Europe.

The 9th and 10th of August we passed by an archipelago of islands and islets, termed Champagne Archipelago; all the islands of which it is composed are sterile and whitish; the major part are of whimsical and picturesque conformation; one of them especially was remarkable from its perfect resemblance of a bowl turned downwards. We called it Freycinet. It is easily distinguished from the others, not only by its singular form, but likewise by its elevation, superior to that of the rest. Not far from this island is another, which presents the appearance of the ruins of an immense edifice; Lucas was the name bestowed on it, in honour of the captain of the ship who, in the Redoubtable, did himself so much honour contending with the Victory. Some other islands of this archipelago received the denominations Forbin, Commerçon, Aguessau, Du Guefelin, &c.

The whole of these islands are small, the largest not exceeding three leagues in length, while fifteen or sixteen that we enumerated scarcely surpassed half a league. The continent, which faintly shewed itself beyond the islands, continued sterile, and fatiguingly uniform. The seas here are constantly well stocked with fish, and increased our collections by several species of balistæ, chætodons, lophi, pelagic crustaceæ, and soft zoophytes.

The 11th, in lat.  $14^{\circ} 47' 50''$  S., long.  $122^{\circ} 11' 32''$  E. of Paris, we discovered a new groupe of islands, in front of which we anchored. An officer immediately left the ship to reconnoitre the coast more nearly, and find a place fit for the debarkation; but in vain did he sail along these formidable islands for several hours, he found them at every point defended by long chains of rocks, against which the sea beats impetuously, and which had no vacancy or passage between them. The number of these islands is ten or twelve, and they form part of the great archipelago of the north-west, which

which we shall shortly more fully particularize; they were termed the islands D'Arcole, and the more remarkable among them received the appellations Colbert, Buffon, Deffaix, Kerauden, Bernoulli, &c. &c.

While at anchor off the islands Arcole, the difference of soundings shewed that the tide here rises from 20 to 25 feet, which confirms the observation made by M. Ronfard in the island Depuch; and agrees with the account of Dampier. This celebrated navigator was on the point, as is known, of falling a sacrifice to these extraordinary tides, his vessel grounding in the very spot where the day before he had found five fathoms water. This circumstance adds greatly to the danger of navigating these seas, and seems to be the chief cause of the violent currents experienced here.

The 12th, we continued along the great archipelago, the first points of which we recognized the day before: it offers, collectively, the most whimsical and most wild appearance. In every quarter islands arise under a thousand shapes, sandy, barren, and white; several resemble immense antique tombs; some appear connected by chains of reefs; others are defended by large sand-banks; all, likewise, that can be distinguished of the continent, has the same hideous aspect of sterility, the same monotonous colour and constitution.

In midst of these numerous islands nothing smiling appears; the soil is naked; the burning sky shews itself always clear and void of clouds; the waves are never agitated save by the nocturnal gales of which I have spoken: the human race seems to avoid these ungracious shores; at least, we saw no traces of the habitation of man, or even of his having occasionally frequented them. The seaman, appalled as it were at the frightful solitude, assailed by dangers ever renewed, is astonished, and turns away his aching sight from such unhappy shores; and when he reflects that these inhospitable islands border, I may say, on those of the great archipelago of Asia, islands in which nature has lavishly poured out her treasures and her blessings, he finds it difficult to conceive how such perfect sterility can have an existence by the side of the most overflowing fruitfulness. In vain does he seek for the real elements of this opposition in the ordinary laws of nature; neither can he fathom them, nor form the least conjecture. But this is not the only phenomenon, singular in its kind, which the physical constitution of New Holland presents; we shall find equal subject for astonishment and meditation in each of the different parts of the history of this great continent.

The 13th August, we continued through the archipelago, successively passing from fifteen to twenty islands, of greater or less dimensions, but absolutely the same as those of the previous day, and to which we gave the designations Forbin, William Tell, Suffren, Berthier, Tournefort, Corvisart, Jussieu, &c., as in the chart.

The 14th, we continued pretty close along the land, which apparently forms part of this archipelago; it was bordered every where by reefs and breakers, against which the sea dashes with violence, rising in long foaming sheaves.

Objectæ Salsæ spumant aspergine cautes.

VIRG. ÆNEID.

Never before had a sight so astonishing come under our notice. "These breakers," says M. Boullanger in his journal, "form in appearance several lines parallel to the coast, and but little distant one behind the other; above them the waves rise, successively dashing with fury, and for a space of nearly fifteen leagues present one horrible cascade!" We steered at this time between banks, where oftentimes the plummet gave but six fathoms water, then even, when we were several leagues from and perfectly out of sight of land. At noon we had a dead calm, and the currents bearing us towards the reefs, we let fall an anchor, and kept where we were until 11 at night. It

was not until after we had anchored that we were sensible of the previous imminent peril of our situation ; we then discovered that the currents, in the direction of the horrible ledge I have described, ran two knots an hour. This part of New Holland is truly frightful : all the islands of it that we saw were shockingly sterile ; of these the most considerable received their names from Mollein, Dupleix, Monge, La Place, Cassini, &c. &c.

Through the whole of the 15th we continued our navigation between shallows and sand banks, obliged to tack repeatedly, and only escaping one danger to encounter another.

Still, dangerous as this navigation, it did not derange M. Lefueur and myself from our ordinary occupations ; and this day was commemorated by an important discovery, that of a new genus of fish, (*Balistapodus Wittenis* N.) allied to that of the balistæ, but differing in the total absence of a ventral fin : this last characteristic forms the first type of a new order in the ichthyological system of my master, the illustrious Lacepede. This celebrated naturalist, in fact, has not confined himself, in his general classification of fish, to presenting all the species hitherto known ; but, rising to more general and philosophical considerations, he has compared all the chief relations of the organization of these animals, and determined all the possible combinations of the principal exterior organs. Analyzing, then, all the combinations hitherto known, he deduced the existence, or at least presumed on the possibility of the existence, of those which till then remained without a type or distinction in nature ; and from that instant, forestalling time and experience, he ventured to fix in tables the position which each of these unknown groupes should occupy on some future day. His grand work on Fishes was not yet finished, and already were his bold conceptions realized.

On the 16th there sprung up a very strong gale from the east-south-east, which obliged us to anchor at day-break, and which continued until the 18th : but already had we terminated our exploration of the north-west archipelago. It was denominated the Archipelago Buonaparte, in honour of the first magistrate of our country, the august patron of our expedition.

At this epoch also the great privations to which we were subject pressed heavily on us ; the detestable food we had been reduced to, since our departure from the Isle of France, had shaken the constitution of the most robust ; the scurvy already exercised its ravages, and preyed on several of our mariners : sad presage of the misfortunes this malady was doomed one day to occasion ! Our stock of water was near exhaustion, and we had acquired the positive certainty of being unable to recruit it on these shores. The epoch of the change of the monsoon was at hand, and the hurricanes which accompany it were not to be awaited on shores like these ; finally, we were in want of a new long boat, and solicitous of effecting a re-union with the Naturaliste. These united considerations determined the commander to finish his further examination of De Witt's Land, with the large archipelago Buonaparte, in latitude  $13^{\circ} 15'$  south, longitude  $123^{\circ} 30'$  east of the meridian of Paris.

#### CHAP. VIII. — *Residence at Timor.*

[From the 18th of August to the 13th of November 1801.]

SCARCELY yet had two days elapsed since our departure from the arid shores of New Holland, and already the lofty mountains of Timor were distinguished. Three tiers of frowning mountains, rising in a line with the length of the island, formed a triple amphitheatre, the last stages of which, projected into the country, appeared the most elevated.

elevated. These mountains, notwithstanding their huge dimensions, presented a gentle slope; their procession was regular and uniform, and their broad summits were graduated insensibly by gentle undulations, which terminated with the shores of the ocean. All the backs of these mountains were covered with vigorous vegetation; the valleys all were covered with the verdure of deep forests, above the other trees of which in every part were seen the elegant summits of the cocoa-palm, of arecas, and lataniers, the benignant livery of equatorial climes.

Soon had we passed the coasts of Amaraffi, and found ourselves at the opening of the strait formed by Timor and the island Rotti, (Pooloo Rotti) an island still more celebrated for the beauty of its women than for its mines of copper. On the 21st of August, in the morning, we passed this strait; afterwards doubling the northern point of the small island Landoö, (Pooloo Landoë) which, in common charts, as well as several others, is confounded with Rotti; we discovered the entrance of a second strait formed by the isle Simão, (Pooloo Semawoo) as it bends towards the western promontory of Timor. At two, we cast anchor in the middle of this strait, and opposite to a pretty bay belonging to the isle of Simão. A site more delightful and picturesque than that we now enjoyed would perhaps be difficult to find: surrounded on all sides by land, we seemed in midst of a charming lake; fish of the most varied species and liveliest colours, peaceful inhabitants of its waves, were vastly multiplied in its bosom; and on whatever side the eye was directed, it was greeted by the perspective of the most profuse fertility. How great the contrast between these and the neighbouring shores, so monotonous and sterile, of New Holland!

As soon as we had cast anchor, M. H. Freycinet set off with the larger boat for Coopang, (Kupang) the chief establishment of the Dutch at Timor. He was deputed to present our passport to the governor, and obtain a pilot to conduct us to the anchorage of the bay of Babão, on the southern side of which the town of Coopang is placed. This gentleman did not return till the succeeding day: he informed us, that his request had experienced at first some opposition from the king of these countries, who, knowing nothing of our nation, confounded us with our enemies the English. This officer likewise informed us, that the island abounded greatly in provisions and refreshments of every kind, which could be obtained at a very moderate price.

The pilot who came with him was a Frenchman, a native of Bourdeaux, and cannonier in the service of the Dutch company, who had, for the last twelve or fifteen years, resided in those distant regions. He related to us, that the English having rendered themselves masters of the island some years before, by their violence and rapine, had induced the inhabitants to take up arms against them; that Fort Concord, into which they withdrew, being carried by assault, 70 or 80 Englishmen were butchered, and devoured by the ferocious Malays; that ever since the most implacable hatred subsisted throughout the whole Malay nation towards the English, and whatever reminded them of these conquerors.

While our former countryman was giving us these details, we were employed in raising the anchor; and soon as this was a-peak, we made sail to leave the strait of Simão for the road of Coopang. "Nothing can be conceived," says M. Boullanger in his journal, and with great truth, "more pleasing than the short navigation between Timor and Simão: the channel is but two leagues wide; so that at an equal distance from the two islands both shores are distinctly seen. Every cape we doubled produced a novel prospect, constantly different from the preceding, but as constantly delightful and romantic." At seven we anchored in the road of Coopang, opposite Fort Concord.

The next day, 23d of August, we went in a body to pay our first visit to M. Lof-



sett, the governor-general of the island Timor, and the archipelago dependent upon it : he received us with the greatest kindness, and proffered us every assistance we might require. On the same day, two large houses were set apart for us ; in one of these our commander took up his abode with the astronomer, the geographer, Messrs. Petit and Lefueur ; while the other was made the residence of all the naturalists.

Behold us now at one of the most remarkable eras of our voyage. No country perhaps is more interesting, and, at the same time, few so little known as the great island Timor. Situate in midst of the equatorial regions, covered with the most useful vegetables, and the most precious animals, intermediate between New Holland and the other islands of the great archipelago of Asia, it presents, in its atmospherical and geological constitution, in its different productions, and in its physical and political revolutions, important subjects of enquiry and meditation. There are found united three distinct races of men, who, placed on the same shores at a period lost in the night of time, offer themselves to the observer, even at the present day, with all the primitive character of the ancient people to which they severally owe their origin.

To the first of these races belong the Aborigines, driven now into the interior of the country ; still strangers to almost all social institutions, still armed with the bow, the arrow, and club of Carnouny ; sworn enemies of the Malays, swift of foot, inhabitants of the hollows of rocks, or the deep shades of the forest, living wholly on fruits and the spoil of the chase ; ever in arms, ever at war, either among themselves or with the Malays, ferocious in all their appetites, in all their habitudes, anthropophagi, as it is said, and combining all the character of the true negro race, having short, woolly, and crisp hair, black complexion, &c.

The second class of inhabitants is formed of the Malays, with long hair, and of a red copper colour : descended from those ferocious inhabitants of Malacca, conquerors, at an early date, of the great Asiatic archipelago, the men of this race still preserve an independent character, and with it the audacity and loftiness of their ancestors.

Succeed to these valorous people, as the third race, the Chinese, settled during many centuries in the major part of the islands of the great archipelago ; crafty dealers, indefatigable in trade, cowardly and weak, they have never been able to obtain, and never have merited dominion.

Separate, however, from the three people of which I have traced a sketch, and which, generally speaking, form the population of the country, there are found at Timor some mestee Portuguese, wretched remains of the conquerors of Asia, lamentable monuments of the vicissitudes of nations, and the revolutions of empires\*.

Lastly,

\* The French universally delight in vilifying, and most unjustly, the Portuguese nation. That nation is blameable, no doubt, in having suffered the others of Europe to get the start of it in science and the arts ; her government, no doubt, has been culpable for having neglected the improvement of the human mind ; but, in other points, let us ask, where is the great deficiency between her flourishing commerce of the 15th and 16th century, and that she at present enjoys ? where the falling-off of grandeur between now and then ? where the vicissitude of nations and revolutions of empire, so forcibly dwelt on by M. Peron, in the instance of Portugal ? Portugal, while other nations are aliens, not even excepting the English, is the ally of China, and enjoys exclusive immunities and privileges, a friendship and a confidence which she has preserved uninterruptedly for nearly two centuries : of her Asiatic possessions, she has for ages preserved all those which were requisite for that participation in the trade of the East, which her rank in Europe warrants : she has constantly maintained her settlements on the eastern shores of Africa ; while in America the extent and population, the commerce and prosperity of her dominions, rapidly encreasing, are secondary only to those of the United States, and Spain, (unless indeed the West Indies be taken into the computation). If Portugal, at one time, supplied the whole of Europe with Asiatic commodities, it was when they were rarities ; and, although she, but supplies herself, and some few others now, yet, from the greatly



Lastly, the conquerors of the Portuguese inhabit these shores themselves, with difficulty upholding the ancient glory of the Batavian name, and preserving no longer, but by dint of policy, and by the forbearance of the people, the dominion earned by so many feats of bravery and heroism.

In midst of all these interesting objects, I neglected nothing to render of utility our residence at Timor. I collected the different materials for the general topography of this great island; I moreover paid particular attention to the history of the Aborigines of the Asiatic archipelago, the vestiges and monuments of whom are found in the interior of the majority of the large islands of this archipelago, in Sumatra, Borneo, Macassar, Timor, Ceylon, Mayindanao, the Philippines, &c. But this portion of my labours being intended for a distinct publication, I shall confine myself in this chapter to presenting such details only as more immediately pertain to our history.

As we have noticed, the French nation was unknown to the people of Timor; and no individual remembered ever having seen before a French flag at Coopang; our communication with the natives, consequently, began under the most unfavourable auspices; and mistrust uniting against us, with the proud reserve natural to the Malays, we remained for some days in a manner insulated among them; but they were shortly enabled to judge from the deference and respect shewn us by the Dutch governor and his officers, that we belonged to a powerful and respectable nation; this reflection became the first pledge of the friendship we cemented with them. The frank and generous character which we never ceased displaying in all our intercourse with them, completed the hold which respect had begun on their affections; and we venture to affirm, that the French name will long be cherished by these brave men, to whom we first made it known.

The 25th of August, in the morning, I went down to the shore; it was low water, and numerous groupes of Malays were employed in collecting the different animals left by the tide. Never had I seen before instances of such great fecundity: fish, molluscæ, testaceous and crustaceous animals, all seemed equally multiplied on these shores; but nothing could surpass the beauty and singularity of the spectacle presented by the solid zoophytes, vulgarly termed madrepores. The whole shore was formed of them; all the rocks on which we walked then without wetting the feet, were alive, animated, and shewed themselves under forms so whimsical and singular, of such various, rich, and bright colours, that the eye was even dazzled. Here, the tubipora musica, proud of the splendour of its mansion, spread out its green and fringed feelers; on seeing the large semi-globular masses it forms above the waves, one would imagine them so many green-swards on a bed of coral: in other parts, enormous madreporic rocks, from six-

greatly increased consumption, the tonnage annually employed for this purpose is perhaps equal to what was then employed, and if her trade with the Brazils be included, is more than doubled. Then, as to her grandeur, her dominions are the same, but increased in population, her prosperity as great, and her children as brave, yes, even as when Henriquez annihilated the Moors. If this be disputed, let the reader reflect that, assisted by England, they have withstood the whole might of the continent of Europe, prostrate at the feet of the sovereign of France; have for two years withstood, and thinned the ranks of those armies, headed by those generals, which in a few months subdued Italy, Prussia, Austria, and Russia: and that those armies, after the two years, possess no more than a few towns, beyond the ground they stand on, in the country. Was it more glorious for the Portuguese to have overcome the Moors than it is to defy the Lord of Continental Europe, backed by all his means and might? Has Portugal at any period assumed a more grand or admirable posture? Then, if commerce and prosperity be taken as a base of grandeur, Portugal is more commercial, her adventures more diffused, now than at any period, and her positive prosperity equal, if not superior. Nor has she suffered vicissitude, nor her affairs a revolution, unless in the brain of ignorance, or irreflection. T<sup>h</sup>.

teen to twenty feet high, rose from the bottom, hard as marble, and of various hues ; these gigantic masses it is of which all the small islands of this bay consist. These it is which play the chief part in the progressive diminution of depth in the bay of Babão, a remarkable phenomenon of which we shall speak in another place. In the midst of the mountains of the interior of Timor, in the deep bosom of the vallies, in the ravines of torrents, every where are found the wrecks of these astonishing animals, while the mind is inadequate to the conception by what means nature has been enabled to raise these plateaux of madrepores, of such huge dimensions, to so great a height above the present level of the sea. This, however, is not the only phenomenon deducible from the study of these zoophytes : in a *Memoire sur quelques Observations Zoologiques applicable à la Theorie de la Terre* \*, presented by me to the Institute, I have remarked several more ; and in the history of Timor we shall again see others still more interesting, especially in the zoological part of our labours.

The 26th, Messrs. Depuch, Bernier, Lefueur, and myself, formed a party on a slight excursion into the neighbourhood of Coopang. We soon found ourselves opposite to a most charming abode : it was placed in midst of a beautiful plantation of cocoa-trees ; a rivulet of fresh water ran with pleasing murmur beneath them, and the house, surrounded by a simple but elegant peristyle, resembled a small antique temple, at the extremity of a long avenue of bananiers, orange, pomegranate, and other trees, grateful either from their beauty or their fragrance.

Delighted with the appearance of this mansion, we were about to enter the grounds by a gate of open-work which was then open, when a Malay, armed with a long spear, placed himself in the entrance, and opposed our passage ; his attitude was threatening, and haughtiness and disdain were depicted in his countenance. Whilst we were endeavouring to make him acquainted with our desire of seeing the beautiful plantation before us, a second slave presented himself, with a spear, like that of the former, and, in a manner still more insolent than that of his fellow, forbade admission. We went away with a sentiment of disgust for the master of the place, which it would be difficult to paint.

In the mean time, in proportion as we penetrated deeper into the interior, our collection rapidly increased, so much so indeed, that we were under necessity soon to seek a place of rest. A Malay house offered its shelter, in which we were received with the frank cordiality characteristic of the inhabitants of Timor. Doudou, doudou, bâé oran di France, (be seated, be seated, good men of France,) was the first salutation of him who appeared to be the master of the house. We begged some fresh cocoa-nuts ; a youth immediately skipped away, and with inconceivable agility climbed a neighbouring cocoa-tree, cut four cocoas, and holding two by his mouth, and two with one of his hands, descended as quickly from the tree. While we were admiring the singular manner in which the loftiest trees were thus ascended, a manner I shall elsewhere explain, the Malays themselves examined us with much apparent interest ; our physiognomy pleased them, and our youth in particular : Bâé orun mouda, (good young men,) was reiterated from mouth to mouth in a half whisper.

One of their spears excited my attention : I approached to examine it, and desiring to know the manner in which they use it, I begged one of the men near me to give me a specimen. The manœuvres he had the complaisance to repeat before me, seemed to remind him of the events which had lately taken place in the island. Orun ingress, said he, Orun boonoo, (English-men,\* murderous men): his physiognomy was now

\* *Memoirs on some Zoological Observations applicable to the Theory of the Earth.*

animated, Oran jâhat, repeated he, (wicked men,) and he brandished his spear with violence: become now almost furious, he took a cocoa-nut, fixed it on the point of his spear, and signified to us by gestures in no respect equivocal, that after cutting off the heads of the English, they had paraded them on their lances; that they had had a warlike dance around them, and that after cutting their bodies in pieces they had eaten them.—We shall return to this horrible practice of eating human flesh, a practice much more common formerly in all the islands of the Archipelago of Asia, but which the Europeans have gradually succeeded in abolishing almost every where, and which here especially remains wholly without excuse, seeing that no people was ever more liberally endowed by nature than those which now engage our attention. I shall only add, that the thirst of vengeance was never more exemplified in any nation than in the inhabitants of Timor against the English. In this respect they fully justify what the most exact historians relate of the character of their progenitors.

To this soon succeeded a widely different scene: the young women, at our approach, had all of them taken refuge in a kind of seraglio they generally inhabit, and which I shall in another place describe. Still more curious than timid, they never ceased looking at us through the interstices of the bamboos of which the sides of the hut were formed; and, as we naturally turned our eyes most often towards this part, our good Malay, who seemed every instant better satisfied with his new friends, gave us an additional proof of his confidence by making signs to his wives to approach. They were five in number, the eldest not more than five-and-twenty years of age, and all of them conspicuous for that regular and elegant shape, those delicate contours, and that soft and affectionate physiognomy, the constant appendages of the youthful female of this country.

The sight of the young strangers seemed to make a lively impression; but they quickly laid aside their natural timidity to receive the different presents with which we loaded them. Shortly after we left all these good people, to resume the road to Coopang. On our departure the most affectionate testimony of gratitude was lavished on us, even by the females, who had ceased to be fearful of directing towards us their large black eyes, and who insisted, a piece of gallantry rather remarkable, on making us each a trifling present.

The 28th of August, we received a visit from the king of the island of Saboo, (Sawoo) by name Amadima: he was of the middle size, with a pleasing and lively countenance, and about five-and-forty years of age. We received the monarch in an apartment belonging to my colleague, Depuch, and myself, but had reason to repent our conduct; for, what with the princes, and the great officers who accompanied the monarch, almost all that was moveable was taken away. An inclination to thieving is strongly predominant in the Malays, and their adroitness in this art was such, that they made as many contributors as there were persons on shore. They possess this vice in common with all savage or slightly civilized people; which clearly proves, as a passing remark, that legislators have with reason made the sacredness of property the basis of their social institutions.

Of all the articles we exhibited to the good Amadima, that which the most astonished him, was phosphorus: its spontaneous inflammation, the rapidity of its combustion, the colour of its flame, all seemed to the simple monarch so prodigious, that he spared no pains to induce me to part with the bottle in which I preserved some ounces of this substance. After having in vain proffered me in exchange a number of fowls, hogs, and sheep, he seemed desirous of a last temptation. With a confident look, he called to one of his great officers, caused a very pretty betel-bag to be brought to him,

him, at the bottom of which was a small bundle of linen ; this he took, unrolled, and with an air of assurance, as ridiculous as difficult to describe, presented—a Spanish dollar.—He seemed to say, “For this you can deny me nothing.” I still continued to refuse his request, much to his astonishment ; and the poor king, unable to procure the bottle, was reduced to beg only a small piece of the phosphorus it contained. In vain did I represent the danger which such an article bore with it. Amadima repeated his solicitations in such an instant manner, that, to preserve his friendship, I at length complied, well assured beforehand that the present, formidable as that of Medea, would soon cure him of his partiality for phosphorus. I took, therefore, a piece about two inches in length ; and, after strongly charging him not to rub it, folded it in some damped linen, and presented it to the Malay prince, who placed it in his handsome betel-bag ; when, after saluting me on the nose, according to the custom of the country, he disappeared, with all his numerous followers. Shortly after, he returned in the deepest consternation ; the phosphorus, as I predicted, had caught fire, the betel-bag was consumed, and several of the most officious courtizans had had their hands burnt. With difficulty M. Depuch and myself succeeded in calming the affliction of Amadima, by presenting him with a handkerchief as an indemnification for the bag destroyed by the phosphorus ; while this article, from that instant, obtained the name of *api taivus*, (fire that occasions fright).

This last kindness completely endeared me to the King of Saboo. “Orun Peron,” said he to me, at parting, “thou art the good friend of Amadima ; to-morrow he will send you a hog.” He was good as his word, and came to present it himself. We kept him to dine with us : French cookery seemed to please him, for he honoured it with hearty appetite ; but as we had been wholly destitute of wine from the period of our leaving the Isle of France, we had only some bad rum to offer him, which, however, he deemed excellent ; at least, he drank of it with so much avidity, that we had great difficulty in preventing him from becoming intoxicated. In other respects he conducted himself with that air of dignity which, a result of the habit of commanding, particularly characterizes depositaries of power.

The 29th of August, while I was engaged on a new excursion into the country with the benevolent Riédlé, Messrs. Depuch and Lefueur, our commander, accompanied by some of our companions, went to pay a visit to the widow of the late governor of Timor, Mad<sup>me</sup> Van Esten. This lady, a native of Amboyna, of Malay descent, and about forty-five or fifty years of age, is very plump, and has much of dignity expressed in her countenance. Heiress of her husband, she enjoyed, at Timor, a fortune, for those regions immense ; in fact, she is reputed to have not less than from twelve to fifteen hundred slaves, and the richest plantations of the country belong to her. Many of these, unfortunately, are the sad fruit of the vexatious and arbitrary seizures of her husband. As for her, of a mild and easy character, a pleasing and even lively conversation, she is generally beloved by the natives ; and the Dutch governor, M. Loilstett, though envious of a fortune which allows this lady to make a more splendid appearance than is in his power, shewed her great respect : him it was who, on occasion of the visit of which I speak, introduced our companions to the lady.

“The country-house to which we went,” says M. Boullanger, “is situated on the margin of the sea : on our way thither we traversed a delightful country ; it was watered by rivulets in every direction ; and consisted, as it were, of one continued wood of bananiers, mangles, cocoas, and lataniers, with a thousand other trees unknown in Europe. As we advanced towards the dwelling, these trees were less close together,

together, and presented a broad avenue, the middle of which was paved and fanded with great nicety; beyond, in a verdant pavilion, was a large square basin, the cool and limpid waters of which were animated by the sports of a vast number of beautiful carp. Farther on, we arrived at an iron gate, and a trellis fence, supported with pillars of stone. This was the entrance to the dwelling. Opposite to this gate was a large peristyle, with two openings, supported by columns, the upper part of which formed a handsome Chinese pavilion. Beyond the peristyle was a court, and at the bottom of it the house itself, defended from the heat with two rows of exterior galleries, similarly supported by columns. The pavement of these galleries was painted, and rubbed like our apartments in Europe: they were furnished with very handsome cane chairs, and vases of bronze placed near every one, in these regions, where betel is constantly masticated.

"The mistress of the house, a Malay, native of Amboyna, awaited us, standing beneath her gallery: she was dressed in a very rich and handsome robe (*pagne*). On her left were about thirty young girls, elegantly dressed in cotton robes, with white corsets, their long black hair braided and turned round the head. On her right were some male slaves, in waistcoats and white pantaloons; in the lower gallery other male slaves in long red scarfs. The regularity, the uniform and singular costume, the young girls dressed with greatest nicety, who, like so many nymphs, seemed to groupe themselves around their goddess, the site of this scene, the cool of the neighbouring forest, the gentle murmur of the rivulet, the view of the ocean on which the mansion was seated, altogether possessed so much grandeur, somewhat so noble, so elegant, and picturesque, as enchanted us all.

"After the usual compliments and courtesies, the scene became still more interesting; the young girls withdrew, and in an instant re-appeared, loaded with the different parts of a collation equally costly and elegant. Here one gracefully presented a superb China cabinet; this one handed sweetmeats; a third poured out tea; others, in short, and with great rapidity, succeeded, offering, in their turn, to each of the guests pastry, sweetmeats, and confectionary of a thousand different kinds. Their arrival with this collation, their graceful and measured deportment, the species of evolutions they performed, which shewed them in succession in every point of view, and their deep silence, all contributed to remind the French of the charming scene of the toilette of Venus in the ballet of Paris.

"The visit being prolonged till nine o'clock in the evening, we were already under anxiety respecting our return, which we feared we should have to effect in the midst of darkness, when, all at once, the red-mantled slaves appeared, each of them with a long bundle in the hand of the leaves of the *latanier*, which, like so many blazing flambeaux, spread considerable light to a distance. Then it was that I fancied myself with Orpheus, on his descent to the infernal regions; for our Timorians, with their torches, their dress, and natural colour, might easily have been mistaken for the devils of the opera; their mournful and piercing cries repeated at unequal intervals, completed the similitude. Under this romantic and whimsical escort did the governor and us arrive at Coopang."

The 3d of September, M. Ronfard, entrusted by the commander with the construction of a new long-boat, to replace that lost in the bay of the Geographer, succeeded in laying it on the stocks; but the indulgence of the Malays, and the small number of builders, who moreover successively fell ill, rendered the prosecution of the work exceedingly tedious and difficult, notwithstanding the zeal of the officers employed in its direction.

Among the individuals whom I had occasion to become most particularly acquainted with at Timor, was a respectable old man, whose noble and open countenance every day attached me more and more to him. He had noticed my predilection for the productions of the sea, and frequently came to tender me the tribute of his fishing and researches. The liberal manner in which I rewarded his kind officiousness, entirely won the affections of this good old man; I was his Sobatati (the friend of his heart). Often had he invited me in the most pressing manner to visit his abode, but hitherto my occupations had prevented me.

On the 4th of September, with Messrs. Depuch and Bernier, I set off for the valley of Oba, a delightful spot in the neighbourhood of Coopang, in which was the house of the old Malay: one of his young children served us as a guide. We shortly reached that beautiful mansion whence we had been so rudely driven on our first arrival at Timor. I had afterwards been informed that it belonged to Mad<sup>me</sup> Van Essen, and that it was the same which M. Boullanger described with so much warmth and truth. All that surprized me was that our young guide should conduct us thither, when, of a sudden, he turned out of the road by a bye-path, which led us to a small cabin, similar to those belonging to the poorest class of Malays in this country. The simplicity of this sort of hut seemed to add a new charm to the delightful landscape around; tufted trees, loaded with flowers and fruit, protected it with their shade; a multitude of birds, decked in the richest livery, wantoned mid the branches of the trees; and near this asylum of innocence glided a gentle streamlet.

The old man we came to visit, was seated at the entrance of his cabin, occupied in playing on the sagoon; a boy, younger than the one who was our guide, accompanied him on the flute peculiar to this region; his wife, a few steps from him, was spinning watt, a substance used by this people in weaving; and his young daughter, who did not appear more than twelve years of age, was making rice-cakes to carry next day to the bazar, or public market\*.

At sight of us the whole family rose, and the joy was general. Be seated, be seated, good Frenchmen, was the first exclamation from every mouth. The weather was very warm, and the walk had greatly heated us: for our refreshment they brought a long cylinder of bamboo filled with buffalo's milk still warm. My companions and I took hearty draughts of it, and afterwards we made presents to each of our hosts: the mother received a red handkerchief; the young girl ribbands, a mirror, needles, and pins; to each of the boys we gave a file and a knife; to the father a hatchet and a little saw. A demeanor so generous won the hearts of all, and the most lively joy sparkled on the countenance of every one.

We took too near an interest in this worthy family not to be solicitous of more intimate knowledge of it. In answer to our inquiries, we learnt that the respectable old man was named Neas, his sweet companion Sorazana; his young daughter Elzerina; the elder son Pone, and the younger Cornelis. The last, of weaker constitution, was of very regular features, his countenance full of candour and expression; he was remarkably lively, and had all the defects and good qualities incident to this character, when united to goodness of heart, to a sprightly imagination, and a quick conception. Pone, on the other hand, of a more robust nature, had a stronger pronounced and more martial look; he was serious and thoughtful: his goodness of heart was not inferior to that of Cornelis, but it was concealed beneath a less softened exterior.

\* A nearly similar tale, as will be seen on proceeding, to that given by Sterne, of the Chevalier de St. Louis, in his *Sentimental Journey*. Tr.



Elzerina shone with all the charms that favouring nature stamps on the lovely companions of man in these regions; brought up under the eye of her parents, she was modest, timid, and seemed still more affectionate and sensible even than her brethren.

While congratulating Neas on the good dispositions of these young children, we saw some tears drop from his eyes; and at the instant when grief had the mastery, in a tone that pierced us to the heart, he exclaimed, "Oran di France ada bâé," (men of France, you are good). He was silent, but we readily inferred that he meant to continue—"all the Europeans are not good as you are." At this period we were not sufficient masters of the Malay tongue to push the conversation much farther; but the gestures of Neas, a language which, among nations in a state of barbarism, or but little civilized, possesses so much force and expression, did not admit of our mistaking the cause of his complaint and his tears; and in the after-part of our stay, and on our second visit to Timor, I learned the whole history of this interesting man.

Neas had been King of Coopang: to him it was that this magnificent plantation originally belonged, in the midst of which we have represented the mansion of Mad<sup>me</sup> Van Eften to be situated. This part of the coast, as may be gathered from my description of it, and that of M. Boullanger, is one of the most beautiful and fertile spots of the island. The Dutch governors long coveted it; but the ancestors of Neas, attached to domains inherited from their fathers, pertinaciously refused to enter into treaty for its alienation: Neas appearing equally obstinate. M. Van Eften found means to render him suspected, deprived him of his dignity, and afterwards obliged him, by menaces and ill treatment, to alienate his rich and beautiful inheritance, with reserve to himself of the humble cabin alone, his present abode, and a small contiguous enclosure.

Still, though thus deprived of the rank and possessions of his ancestors, Neas preserves in misfortune an exemplary magnanimity. Every day this old man descends to the sea-shore to seek his support and that of his family. Oftentimes his children accompany him: here I sometimes saw them, and the sight constantly overwhelmed me with sadness and melancholy. Where the virtuous mind feels for the abuse of power, and the effects of injustice, the keenness of the sensation becomes far more sharp if the victims be interesting and respectable. Fortunately, as in our country, crimes on these distant shores even, sometimes receives its meed of punishment. M. Van Eften died wretchedly, execrated by the Malays, who with justice accused him of having given up their country to the English as a safeguard for his fortune; and despised by the English themselves, who charge him, in defiance of his engagements with them, with having been concerned in the plot of which they became the victims.

So much did the relation I have given endear to me the good King Neas, and such was his attachment to me, that I was constrained to yield to his pressing solicitations of changing names with him: I shall shortly have occasion to return to this affecting custom of this people.

Of the children of the old man, Cornelis most pleased me; he frequently came to see me at Coopang, and often, as I went to Oba, he constantly accompanied me a considerable distance on my return. One day that he put many questions to me respecting the country of France, (*tanua di France*) I enquired if he should not like to go thither with me. Prompted by his natural impetuosity, he constantly answered in the affirmative, but scarcely had he spoke, ere he began to reflect in silence; afterwards, resuming conversation, he made a long speech, the whole of which I could not comprehend. Vexed at not being able to make himself understood, he stopped, and turning to me, "Man Perón," said he, "see what I am about to do:" he then made several



several heaps of sand, greater the one progressively than the other; he afterwards uttered the following speech, which he accompanied by gestures so expressive, I could but imperfectly seize his meaning: "At Coopang, Man Peron, thou art the friend of Cornelis; but when in France, a man will come and say to thee: sell me this red man, and will offer thee a heap of money large as that," (pointing to the smallest mass of sand;) "thou wilt then answer, the red man is Peron's friend: thou wilt make the same reply to those who come to offer thee money in heaps as large as those other heaps of sand:" and he designated them successively, proceeding from the smaller to the larger, and indicating by his gestures that my reluctance would diminish in proportion to the augmentation of the volume of money; "but, at last, some one will tender thee a quantity equal in bulk to this last heap, and thou shalt say: let the red man be a slave: then, Man Peron, I shall never see thee more; I shall be obliged to work laboriously, and poor Cornelis, far from his father Neas, far from his brother Pone, will break his heart with grief."

As he pronounced these last words, this engaging child became so much affected that his eyes were filled with tears. I was myself too sensibly touched with the justice of the reasoning and sagacity of Cornelis, not to participate his emotion; I strove to convince him, that slavery does not exist in France; but, as he was not ignorant that the Dutch, the Portuguese, the English, and the Spaniards, who are best known in these seas, have slaves, he naturally concluded that the French had also; and as, Batavia excepted, they were ignorant whither those were transported that were taken from Timor and the neighbouring islands; as all they know is, that they are transported far, very far away, (jâô, jâô) they are generally persuaded that they are employed in the most laborious and destructive works. I have thought fit to relate this curious anecdote at large, as it affords a proof of the understanding of the inhabitants of these regions, and shews the bad opinion they entertain of Europeans.

As we have before noticed, the scurvy, which began to shew itself among our crew, was one of the reasons for our commander touching at Timor; ten men, afflicted with this cruel malady, were landed at Coopang the day after our arrival, and were stationed in an old warehouse of the Dutch company, which was appointed our hospital. Besides these ten men, who were badly affected, there were many others whose gums were more or less spongy, and exuded blood; of the number of these I was myself one; but these slight symptoms readily gave way to the use of fresh provisions and the land air; and at the epoch I notice, I found myself entirely free from any scorbutic humour.

On the 5th September, signal was made of two English frigates and some small ships of war being in the strait of Simão; alarm now became general, and already preparations were made for calling out the formidable militia of the country, when the disappearance of the squadron restored its calm to the colony.

From the 9th to the 15th, I made a variety of experiments with the dynamometer to ascertain the relative strength of the people of these parts, the results of which will appear in another place.

The 10th September I had occasion to make an interesting remark, which I take blame to myself for not having further prosecuted. Among the individuals who came to visit us, I noticed two who had their fore-teeth ornamented with small plates of silver, of tolerable thickness, which adhered so firmly to the enamel, that notwithstanding every effort I made with my nails, I was unable to disengage them. The men who wore them, ate before me, without seeming inconvenienced by this whimsical finery; they assured me, that they had had them thus stuck to their teeth for four or

five months, and that they would remain until use wore them away. By what means were these men enabled to fix these plates in such a solid manner on the enamel of the teeth? What is this substance which resists thus powerfully the dissolving faculty of the saliva and food? Our dentists are hitherto unacquainted with any capable of braving their agency; they are reduced to use metals, and particularly lead, to defend the carious parts of the teeth; and are absolutely unacquainted with any means of effecting adhesion to the polished surface of their enamel:—the mastic of the Malays would therefore be a valuable acquisition to Europe: but, occupied by such a multiplicity of affairs, I neglected research into this matter, and mention it only that after travellers may remedy my omission.

The 11th September, King Amadima, who seldom suffered many days to elapse without a visit from him, presented himself earlier than usual. “Friend Peron,” said he, “come and eat rice at my house.” His manner, at this instant, had somewhat more affectionate even than usual; and, notwithstanding, there was mingled with it a sort of mystery, which fixed my attention: he took me by the hand, and I followed. On entering his palace, or hut, (for either denomination might be applied to his dwelling,) I perceived an extraordinary number of slaves decked as for a festival. A whole sheep was at the fire under a neighbouring shed; several of the King’s wives were employed in cooking: the purpose of such extraordinary preparations I could not conceive. In a short time the sheep was served up with rice; Amadima dissected the animal, and presented me a piece of five or six pounds weight at least; took himself a still larger piece, and began upon it with tooth and nail, in the most expeditious manner imaginable. I was far from being able to equal him in appetite, but I did my best.

When the first calls of hunger were appeased, the good King made a sign to one of his slaves to bring him a bottle of rum, and after pouring out a quantity into a cocoa-shell; “Man Peron,” said he to me, “thou art the friend of Amadima; King Amadima is the friend of the Man Peron. Man Peron, the King Amadima gives thee his name; wilt thou give him thine?” This singular proposition reminded me of the affecting custom of exchanging names which Cook noticed in the majority of the islands of the Pacific, and which occurs even on the moist and foggy shores of New Zealand. I did not consequently object to this affectionate testimonial of the Malay prince, but, without hesitation, answered: “the Man Peron gives his name to the King Amadima.” The exchange seemed to transport him with joy; we cemented this union by several draughts of rum from the same vessel. From that instant I became the Toowan Amadima: Amadima called me by no other name; and, in return, I endeavoured to call him Peron; still, as I was unaccustomed to this practice, I frequently made a mistake: Amadima, however, in the most undisturbed manner imaginable, kindly rebuked me, and never missed calling me Toowan Amadima. All the slaves present at this exchange, were at the same time instructed to look upon me as the friend of the heart (*fobatati*) of their master, and to call me Toowan Amadima.

After this epoch I had frequently occasion to change names; the forms were constantly equally simple, and sometimes even less so than on the occasion I have described. Not so at Madagascar, where a similar usage prevails. The detail of the ceremony practised there not having hitherto been published, and being connected in some measure with this part of our observations, I give it as extracted from the journal of M. Lislet Geoffroy.

“Ramafoolak,” says M. Lislet, “is chief of this part of the valley of Amboola, and resides at Anoonoobé; he received us very kindly, owing to the information respecting

respecting us transmitted by Dian-Louve. All his captains made us presents, as to the king's friend. My determination of taking my departure early the next day did not admit of my accepting the pledge (serment) which this chief proposed between himself and one of his captains and me. This pledge, or oath, is an alliance made between two men: they mutually engage to love and protect each other, and each has his gossip for the ceremony. They cause the breast of each to be scarified in seven different places, and receive from the scarifications seven drops of blood into a vase containing brandy, or some strong spirituous liquor: they next, each of them, put into the vase a ball and a flint, and dip into the liquor the point of their sword or lance; afterwards, they present each to the other seven spoonfuls of this liquor, which is swallowed. They, in conclusion, affectionately shake each other's hand. The inhabitants of Madagascar religiously observe whatever they promise on such occasions, even at the peril of their life, and look on each other as brothers."

The 12th of September was a day which proved nearly fatal to M. Lefueur. While pursuing a troop of monkies among the rocks which obstruct the course of the river Coopang, he was bitten in the heel by some venomous reptile. Shortly after, a slight numbness made him but too sensible of what he had to apprehend from the bite. He hastened towards the town: already, however, his leg had become hard and stiff, and he bent his knee with much difficulty. To lessen the activity of the virus, he tied his thigh very tight above the knee, but in vain; the thigh began to swell visibly, and it was as much as my unfortunate friend could effect to reach the house. When there, he stretched himself on the ground, overcome with fatigue and agony, already experiencing the first symptoms of a violent fever. I was then absent from home, but our physician M. L'Haridon was there: he immediately, without hesitation, cauterized the wound very deeply, and afterwards applied lint to it, strongly impregnated with ammoniac; of this also he gave a strong dose internally, and recommended the patient to keep as quiet as possible. Soon a profuse perspiration took place; the pains began to abate; and a few days after M. Lefueur felt no other inconvenience than a difficulty of bending the knee, which continued some time, and which he even now occasionally feels somewhat of, on change of weather. This accident served, in our esteem, to justify the excessive horror in which the Malays hold reptiles.

On the 15th of September, all our men, affected with the scurvy, had recovered; but a far more dangerous malady commenced its ravages. Eighteen were already sick of a bad and fatal dysentery, among whom my interesting friend Depuch, my colleague Maugé, and the good and laborious Riédlé. In the mean time, our anxiety respecting the Naturaliste became greater every day; we had hitherto received no intelligence respecting this vessel, and reflected with pain on her situation, when we left her apparently driving to leeward. Every one despaired of her arrival, when, on the 21st September, signal was made of her appearing off the bay of Coopang, and making for the pass. Joy now was universal, and shortly we were joined by our companions, who, not having found us at our place of rendezvous, were not themselves without anxiety respecting us.

The Naturaliste, during her separation, had completed several interesting works in the land of Edel Endraght's Land, and elsewhere, which will be described in the following chapters by M. L. Freycinet, who has taken the trouble himself to edit this portion of the work.

Captain Humelin, on his arrival at Timor, had only two men sick of the scurvy, a circumstance for which he was indebted to his long residence on shore, his personal attention to his crew, and especially to the skill of my estimable friend Doctor Bellefin, the

the physician of his ship. These gentlemen had made use, with great advantage in this disorder, of hot sand-baths, a conception of Mr. Roblet, physician on board the *Solide*, who accompanied M. Marchand in his voyage round the world.

A few days after their arrival, the officers and naturalists of our consort came on shore, and were fixed in a third house, procured for them by the governor. Our colleague M. Levillain preferred taking up his abode with us; he then enjoyed perfect health, and had little reason to suspect himself so near his end.

From the 25th of September to the 1st of October, our commander, who had long laboured under a pernicious intermittent fever, experienced in succession three such violent attacks that for several hours his life was despaired of. Not an instant was to be lost in giving a strong dose of bark; but as that on board our ships was of very inferior quality, I did not hesitate an instant in sharing with him the small quantity of that substance I had brought for my private use from Europe. The medicine operated in a most wonderful manner, arrested the progress of this formidable fever, and presumptively saved his life. Through the whole illness of our chief, M. L'Haridon served him in the stead of a comforter, nurse, and friend. To tell how he was rewarded would shock a generous mind.

The 7th of October was a day of mourning and affliction for both the vessels; M. Picquet, one of our most estimable officers, on this day failed for Batavia. Arrested by order of his commander, whose anger he had had the misfortune to incur, he had been for more than six weeks confined in the Dutch fort; and most cruel orders were given that, on his arrival at Batavia, he should be shut up in the murderous dungeons of the citadel of that place. On this occasion, the staff-major of both vessels never ceased from giving M. Picquet the most flattering testimonials of their esteem and friendship for him. Every day an officer and a naturalist went to keep him company in his prison, and share with him the poor fare they had. On his departure, every one was eager to load him with letters and attestations adapted to rebut the calumnies which might be invented to his prejudice. On arriving at Batavia, M. Picquet was declared at liberty by the regency there, notwithstanding the letters of the commander. Scarcely had he set foot in France, before he was promoted from a midshipman to be a lieutenant. This is sufficient proof of what his crimes were.

On the 11th, the unfortunate Riédle was still in a very bad way; and notwithstanding the most sedulous attention of M. L'Haridon, who, the better to administer succour, had caused him to be transported into his own room, in the evening of this day all hopes of his recovery were lost. For several days before, he had kept his bed; and the inflammation now had proceeded from the rectum to the intestinal canal, occasioning him the most excruciating agony.

On the 12th, one of our cannoneers died; the first of a long list we shall have to display shortly.

On the 18th, another of the crew expired.

On the 21st, the kind-hearted Riédle gave up the ghost; on the 22d he was buried with all the possible solemnity our circumstances admitted, in the self same spot where Nelson, the botanist of Captain Bligh, (and who with him had escaped the perils of the sea when turned adrift by the mutineers of the *Bounty*, to perish of fatigue and exhaustion in reaching Coopang,) had been inhumed. A memorial was raised in honour of these two botanists, over the tomb which inclosed both their remains.

On the 23d, the alarm before excited from the appearance of a British Squadron, was renewed, and with more foundation than on the former occasion. In fact, in the middle of the day, a beautiful English frigate made its appearance, the *Virginia*, which, entering the passage between Pooloo-Simão, and Pooloo-Kia, seemed to steer towards

our

our anchorage. The Dutch governor instantly issued orders for making the necessary disposition of his force to protect the fort and road; many country-soldiers from the environs of Coopang were called in, and descended with rapidity from the neighbouring mountains: nevertheless, no alarm-gun was fired, the signal on which the militia of the interior are bound to repair to Coopang, because these troops are composed of brutal and sanguinary men, who are formidable even to the Dutch themselves. The preparations made were fortunately as useless on this occasion as the former. The captain of the English frigate, after examining our passports, which were carried to him by M. de Montbazin, one of our officers, informed him, that being ignorant of our mission, and learning at Delly, that two French ships were at anchor in Coopang Roads, he had concluded they were merchant ships, and resolved to come and cut them out in spite of the battery of the Dutch, which he seemed to regard as of little consequence. This officer, whose name I regret not to have heard, conducted himself with the greatest delicacy towards us. Learning that our commander was indisposed, he offered M. de Montbazin a present for him of several bottles of wine; but these he did not deem it right to accept. Moreover, M. de Montbazin received information that Ternate, one of the most important possessions of the Dutch, had experienced the same fate as Amboyna and Banda had done before, and that in the road of the former of these two places, a seventy-four gun ship had recently taken fire and blown up. After having thus conversed some time with our officer, the English captain regained the passage of the bay, and made off without firing a single shot, although he was near enough to the fort and town of Coopang to have been able to discharge several broadsides at them. In abstaining thus from hostilities, the English captain appeared anxious of giving us a proof of the esteem and respect in which he held the object of our voyage\*. It appears, moreover, that this destructive climate had not spared his crew; for M. de Montbazin fancied he saw the betwixt decks of the frigate loaded with sick.

The dysentery still continued its cruel ravage on the crews of our two vessels: the number ill was considerable; in each succeeding day some died, and the case of others became desperate. In a distinct memoir which I have submitted to the School of Physic at Paris, I have given my opinion respecting the origin of this scourge; it is sufficient here that I state medical assistance to have been ineffectual. Messrs. L'Haridon, Bellefin, and Taillefer, had the goodness to invite me to their consultations: we opened several bodies, and attempted every means which promised success, but all our endeavours terminated in the melancholy conclusion that *whosoever was grievously afflicted with this terrible malady became its victim*. It pursued us, as will be seen, to the very extremity of the globe, and obliged us every where to commit fresh corpses to the waves.

All our best friends were attacked; my laborious colleague Maugé, had long been on the lists. This estimable man abandoned himself to his excess of zeal even from our first landing; too soon was he its victim!

I have already observed, that soon after his landing from the Naturaliste, M. Levillain had come to lodge with us; it was not long before the formidable climate of Timor caused him to experience its malignity: struck with the same malady as our other companions, he took to his bed, never to rise again.

\* This is a forced compliment on the part of M. Peron; had the English captain's instructions warranted an attack on Coopang, he might have requested the French ships to keep out of the way, but he would have followed his instructions. Had he wantonly and unprovokedly fired a few broadsides, as M. Peron says, he might have done, and occasioned the death of a man in the fort or the town, although our enemies, it would certainly have stopped his promotion, if it had not been followed by some more rigorous punishment. T.R.

At the same time our head under-gardener, Sautier, who likewise resided in our house, was mortally attacked; and to complete our sum of disasters and misfortunes, Depuch, my valuable friend Depuch, received, at my side, the fatal shaft, his summons to the tomb! M. Boullanger also, and M. Lefueur were alike on the sick list; the one afflicted by a violent fever and an inflammable cholera, the other by the general malady, the dreadful dysentery. Even our domestics were so ill as to keep their beds. The consternation was general.

In midst of so many disasters, I preserved my health entire; and I alone, of all who lodged in the same house, was exempt from attack from sickness. This exemption I did not most assuredly owe to taking rest; no one, I dare to challenge the testimony of all, had more assiduously given himself up to labour and fatigue than me; no one had made more splendid or more numerous collections of every kind: and still less did I owe it to my constitution, naturally weak and delicate. In expressing my ideas respecting the cause of the dysentery in hot climates, I shall point out the precautions, as simple as efficacious, by which I kept from this scourge; and I have, moreover, the melancholy certainty that the major part of my companions, by subjecting themselves to the same care with respect to their regimen that I did, would have escaped death.

In our lamentable circumstances, M. L'Haridon did himself not less honour by his assiduity, in attending the sick, than by his generous conduct with respect to them.—Tired of the repeated denials to his applications for the most simple articles, he employed his whole stock of money, sold every article of exchange he possessed, and even a portion of his cloaths, to buy what was necessary for the hospital, thus giving that double example of zeal and generosity which distinguishes the real physician. Nor is this the only action of the kind which we shall have to notice on the part of M. L'Haridon; and we the more gladly proclaim it, as public esteem alone is the truly grateful reward of deeds like these, and as to honour is to multiply them.

The 6th of November, thanks to the unremitting care of M. Renfard, our long-boat was complete, and launched. This day was truly a festival, since it restored us a vessel of which we had such need: we were far from thinking it was doomed to a fate similar to that which it replaced.

M. Picquet was not the only officer we lost; M. St. Croix Lebas, the captain of our frigate, was relanded as sick a few days before our departure, and placed in the Dutch fort, to await there the re-establishment of his health, and his return to Europe.

At length, on the 12th of November in the evening, we went to take our farewell of the governor; and the next morning we made sail from the bay of Coopang, by the passage between Pooloo Kéa and Simão. Our stay at Coopang had been prolonged to eighty-four days, and in every respect had been to us of fatal consequence; it had occasioned a long waste of time, the death of a number of individuals, and the inconvenience of having many sick on board: such were the disastrous consequences of this long stay: it even appears highly probable, that if it had been much longer protracted, the remainder of our crew would have perished. Who, on leaving the island, but thought it would be our last visit to its murderous shores?

CHAP. IX.—*Operations of the Naturaliste at Edel's Land, related by M. Le Freycinet of that Vessel.*

[From the 8th of June to the 16th of July, 1801.]

THE gale which obliged us to make with such precipitation from the bay of the Geographe, on the night of the 8th of June, was now proving fatal to the Naturaliste. This



This vessel, an inferior sailer to the *Geographe*, and in other respects a much worse ship, with difficulty kept from being driven on shore by the winds and currents. The violent pitching of the vessel, and the necessity of carrying sail, made us apprehensive every instant for our mast, the least damage to which would infallibly have occasioned the loss of the ship. Every two hours we were obliged to make a new tack, and this for two entire days, without a moment's rest for the crew; and, spite of every effort, at one time we gave ourselves up for lost, when a slight variation of the wind fortunately enabled us to clear the southern point of the bay.

In the course of the night of the 9th we lost all sight of our consort: the wind still continued to blow hard; and not before the 13th were we able to increase our sails. We availed ourselves of the more favouring weather to steer for the isle Rottneft, the first rendezvous appointed by the commander, and reached it on the 14th. The *Geographe*, contrary to the expectation of all, not being there, we resolved on waiting for her; and Captain Hamelin, that his stay might be rendered useful, sent different boats to seek a landing-place, and examine the different productions of the island Rottneft. In the mean time he dispatched M. Heirsson in one of the boats to examine the mouth of the river Swans, and advance up it as high as possible. For this interesting expedition a week's provision was stowed in the boat.

The 17th of June, Messrs. Milius and Levillain departed to visit the islands S. S. E. of Rottneft; and, at five in the morning the same day, I was myself dispatched in the small boat with Mr. Faure, to reconnoitre with more precision the isle Rottneft, and complete its geography.

"On leaving the ship the weather was fine; but a strong breeze springing up from the N.W. the sea became very mountainous, and the waves, dashing against the sides of my slight bark, threatened it every instant with destruction. In this perilous dilemma, as the wind was adverse, I could not regain the vessel: I then endeavoured to pass to leeward of the isle of Rottneft, but a long chain of breakers stretching out to sea, prevented my effecting this: we had, therefore, no other alternative than to run ashore to prevent inevitable shipwreck and destruction. A small sand-bank appeared opposite to us, for which we steered, and on which we were shortly thrown by the surf. We immediately jumped all of us into the water, and endeavoured to drag the boat on to the beach, but all our efforts were vain, she was covered by the waves in an instant, and with difficulty we preserved, of all our provisions, some few pounds of biscuit; the remainder disappeared together with the boat.

"Disappointed thus of executing the duty with which we were entrusted, by coasting the island, we were yet desirous of attempting its effectuation by land; but the rocks which bound the shore on the northern side were too steep for us to be able to climb; we were, therefore, reduced to make our way through the woods, which being very tufty in this part, admitted of our making but a slow and laborious progress.

"Chance conducted us into a pleasant valley, at the bottom of which were several ponds; we descended to the margin of one of them; a prodigious quantity of bivalve shells of one single species formed round the pond a rim about sixteen feet broad. The water of these ponds was salt.

"From these ponds, which we denominated, from one of our midshipmen, Duvaldailly, we made again for the shore, in hopes of clearing the rocks which in the first instance impeded our progress; but we found their course was uninterruptedly prolonged to the northern cape.

"In traversing these rocks we distinguished a piece of wood which fixed our attention, and excited a painful interest: it was the bitt-pins of a vessel of from three hundred to three hundred and fifty tons, the rubbing of the cables against which was



still distinctly visible; this, with several iron rings we noticed, left us no doubt of a recent shipwreck.

"This unexpected discovery increased our anxiety for the fate of the *Naturaliste*, which we knew to have been at anchor during the tempest near some frightful reefs; it moreover forcibly pointed out to us the horrors of our situation, which every instant became more alarming. In fact, black and ominous clouds were collected at every point of the horizon; gusts of wind blew with violence; the thunder echoed frightfully from the neighbouring vallies; rain fell in torrents, and the waves dashed impetuously on the rocks. In short, we were not ignorant that Captain Hamelin, destitute of a long boat, or indeed any other, would be wholly unable to send us assistance during the prevalence of the storm.

"After a few minutes reflection on the sad posture of our affairs, we directed our steps towards the boat; and by the time we got to it were enveloped in the most profound obscurity. We expected to find it in pieces, the surge having constantly beat on the bank where it laid, but with pleasure we perceived it had, in great measure, withstood the rage of the sea, and that one of its planks only had been driven in. By good luck it was now high water: we entered into the sea to endeavour to pull the boat on to the strand, and fortunately at last succeeded.

"Our boat thus secured, we sought a provision of water; the island appearing to produce none, we spread out our sails to catch the rain, which continued to fall, and dedicated to this object the whole of the night. We likewise this and the succeeding day killed some seals, (*phocas*) the flesh of which we found very well tasted.

"On the 16th of June we perceived the *Naturaliste* under sail; I observed her for a long time with my telescope, and by her course imagined she was endeavouring to near the island. We immediately kindled a large fire to point out the part of the coast where we were. Still no succour appeared at hand throughout the whole day; our situation became critical; and but for the rain had become much more so. I contrived, at length, an expedient to mend our boat, so as we might endeavour to regain our ship. As we wanted nails, I bethought myself of drawing some from the inside of the boat, which fastened matters of smaller import, and were used to nail together the broken plank; the tow of untwisted cordage served to caulk the chink, which I planned to daub over with the oil of the sea-calf, and at last for want of pitch. Fortunately our labours were rendered useless: the wind falling during the night of the 19th, our captain hastened to dispatch a yawl with provisions; and, foreseeing that our boat would have sustained considerable injury in the storm, he likewise sent a carpenter for the purpose of putting it in repair. This completed, we returned on board by three in the afternoon.

"I then learned that the long-boat, dispatched to reconnoitre the islands bearing south-south-east of our anchorage had been wrecked on the continent; that the boat sent up the river of Swans was not yet returned, and that great anxiety was felt for her fate; that, on the 18th, at two in the afternoon, the *Geographe* had been seen from the top-mast eight leagues distant, bearing under topsails towards the north. Every one was at loss to conjecture why the captain, after having himself appointed the rendezvous, had not repaired thither to join us. With respect to Captain Hamelin, deprived as he was of the long boat, his two other boats, and the chief part of his crew, it was out of his power to make sail after the *Geographe*."

The 22d of June the boat sent up the river of Swans having completed its mission, returned. The following details on this subject are given by M. Bailly, who accompanied M. Harisson:

"The river of Swans, discovered by Vlaming in 1697, received its name from  
its

its abounding in black swans, two of which birds he transported alive to Batavia. We saw the mouth of it on the 17th of June in the morning : it was obstructed by a bar of rocks which nearly prevented our entrance ; but after striking twice we succeeded in passing them, in which the soundings rapidly increased. A prodigious multitude of pelicans take up their abode in this part of the river, but we were unable to kill a single one. The beach was covered with an amazing quantity of white, gelatinous, and transparent molluscæ, abandoned by the tide, and which, without doubt, are preyed upon by the birds that frequent these shores. The soil here is composed of downs of sand, more or less elevated ; the rock by which they are terminated next the sea is wholly of calcareous nature, is mixed with sand, and abounds in excavations and chasms, apparently the effect of the waves : in these downs grow different species of shrubs, several of which were then in flower. The *Eucalyptus resinifera* flourished abundantly ; and large flocks of land-birds, especially paroquets, of most beautiful plumage, hovered about the trees, and animated these unknown, wild, and desert shores.

“ At a short distance from the sea, the left bank of the river is precipitous, and presents a bed of sandy and calcareous rocks in horizontal stripes ; shortly after, the opposite bank is equally precipitous, and has the appearance of a large circular wall surmounted with verdure. In every part of these shores are evident traces of their having once been overflowed by the sea : the rock is almost exclusively formed of incrustations of shells, and roots and trunks of petrified trees, phenomena of occurrence in different parts of New Holland. In other respects, the country at this point is flat, and without any eminences of height till after a considerable space inland. Beyond the circular wall I have described, the precipitous appearance passes again to the left side, with a like shew of ruins, and a similar geological constitution.

“ Shortly after, we came to a large basin, formed by a low country, over which the river spreads more amply ; almost the whole of this basin is engrossed by a shallow : on the left bank we observed a sort of branch, or inlet, which seemed to open another communication with the sea ; this inlet or branch we named the Entrance of Moreau, from one of the midshipmen who accompanied us.

“ After doubling a very low point, which projects from the left bank pretty far into the basin, we landed for the night at the foot of a steep bank on the right side ; this almost perpendicular bank has a small interval of sand between it and the river, on which we pitched our tent : we were here in perfect security, the boat afloat and moored to a tree, and its poop among herbage which grew on the shore ; we could not be approached but by crossing the river, or by a descent from the steep bank, at the foot of which we were ; a descent of difficult accomplishment, on account of the steepness of the hill.

“ The summit of this hill commands a most beautiful view : on one side is distinguished the course of the river which descends from a plateau of mountains in the distance, on the other its lower course is seen towards the sea. Both its banks are almost wholly covered with beautiful forests extending deeply into the country. The rocky base, sometimes seen here, is of the same nature as all those I have before noticed ; that is to say, it consists of sand and shells, and is covered with a bed of sand, mingled with vegetable earth, which nourishes the trees of the forest.

“ On the 18th of June, at day-break, we re-embarked to prosecute our voyage. On leaving our resting-place we met with new flocks of pelicans, which hovered about us ; two of them we shot. Continuing our course now, in half an hour's time we grounded on a bank of very soft, unctuous, and adherent mud, from which we were able to

release ourselves only after considerable labour, and by dragging our boat along for a considerable space. The course of the river is, as it were, shut up a line of small islands, either low or entirely overflowed, which we named Heiriffon Land, from the officer who commanded us.

"Near these islands it was that, for the first time, we distinguished black swans, swimming majestically on the water: we killed several; their plumage was entirely black except the pinions, which were white; their beak was red, and their feet black. We observed that, in a few seconds after death the beak lost its beautiful red colour, and became entirely black. The whole of the country we saw from this spot, till night, was low and almost inundated; a layer of sand of large grain, and which seems the decomposed particles of a rock of ancient formation, covers a very thick bed of highly tenaceous, and reddish clay. Other important phenomena arise from this change of composition in the soil. Retained by the clayey stratum, the rain water and the dews either remain on the surface, filter through the quartz sand we have noticed, form small lakes, or run in narrow rills towards the river, whose waters from this instant begin to lose their saltiness; but hitherto they had been nearly as salt as those of the sea. The same evening we pitched our tent in an angle formed by the river and a small branch of it, which Messrs. Heiriffon and Moreau ascended on foot the space of half a league. These gentlemen in their excursion saw the trace of a human foot, the extraordinary dimensions of which occasioned them great surprise.

"The 19th June, after filling our casks at a small well I had discovered the day before, and which did not appear to me the work of nature, we continued to ascend the river: from the point whence we then observed it, its course seemed to be from a chain of mountains at little distance from where we were; this circumstance made us hope to be able to ascend to its source: unfortunately we deceived ourselves respecting the distance of the mountains; for, after continuing our course the whole day long, we perceived they were yet far away. However, at this instant, the bed of the river became much more narrow; but its depth continued still, with little variation, from seven to eight feet.

"In the mean time three days had passed in our ascent up the river into the interior of New Holland: our provisions had greatly diminished, and scarcely sufficient remained to support us on our return: this consideration occasioned us to renounce our first project of continuing our navigation to the foot of the mountains; and the next day, 20th June, we began our return.

"The 21st in the morning, we reached the shallows which detained us on ascending the river: we hoped to avoid them by keeping on the right side, but we were mistaken, and had not proceeded more than three furlongs before we ran aground. In vain did we endeavour to drag our boat over the shoal; we were ultimately obliged to construct a kind of raft, unload our cargo, or at least the weighty part of it, and afterwards, getting into the water, to push it before us. We succeeded at last by two in the afternoon in setting her afloat. Our joy on this occasion was but of short existence: grounding again on a second bank of sand, only half a foot under water, we were obliged to labour several hours in order to overcome this last obstacle; and never should we have succeeded but for a strong breeze which happened most opportunely to relieve us from our critical situation. In fact, at this epoch, we were overcome with fatigue and exhaustion; for thirteen hours had we been in mud and water up to the waist, constantly employed in attempting to remove our boat: we had scarcely more than one provision left; and, as it was impossible we should regain our vessel in less than twenty hours, we could not repair our exhausted powers by nourishment.

In midst of this embarrassment and danger, night came on: we were about to land in order to dry ourselves and recruit our strength, when all at once a terrible noise, resembling the howling of a bull, but much louder, and which seemed to proceed from the neighbouring reeds, petrified us with terror. After this tremendous roar, we lost all inclination to land; and, although half frozen with cold, we preferred passing the night in the water supperless, and without once closing our eyes, owing to the rain and the cold.

The 22d, at day break, all jumped into the water to continue their labour at the boat; the tide rising assisted our efforts, which were at last successful. Shortly after we halted to kindle a large fire in order to warm our frozen limbs, and take some nourishment. Continuing afterwards to descend the river, we at length arrived at its mouth; we left it by keeping along the left bank, and in the evening got on board, dreadfully harassed with fatigue and want of food."

The importance of the relation of Mr. Bailly has caused me to give it at length; it is the more valuable as tending to elucidate the physical history of New Holland, and in this point of view possesses interest as well for the naturalist as the geographer.

In the mean time the boat, shipwrecked on the neighbouring coast, had suffered considerable damage, which necessitated the dispatch of carpenters to repair. Four whole days were employed in this indispensable object, and it was not before the night of the 22d that it returned on board. We then received the following details of the operations and misfortunes of our companions.

On their way to explore the islands south-south-east of our anchorage, on which expedition they failed the 18th June, they at first proceeded alongside a ledge of rocks of considerable extent; they afterwards approached a small barren island, denominated by us Berthollet. South of this last, they discovered a third, nearly as large as the *île Rotneft*, which we named Buache. On this last were a great number of sea-calves at a slight distance from the sea, which appeared as if inclined to dispute the landing of our sailors. Their temerity cost them dear, for many of them were slaughtered.

Obliged to reembark hastily on account of the wind blowing occasionally in gusts from the north-north-west, our companions luffed all night in midst of breakers; the spray was so plentiful, and thrown over our boat in such quantity, as to require three men in constantly baling the water. At three in the morning, exhausted with fatigue, and ignorant what course to take in order to avoid the breakers by which they were surrounded, they resolved on letting down their grapple. At day-break they hoisted sail on a northern tack, and endeavoured to make towards the vessel; but the main-mast of the long boat was soon broken by the violence of the gusts, and, with its fall, fell overboard into the sea: in vain did they attempt to splice it, the fury of the wind rendered all their efforts abortive. Driven now by the waves on the breakers, our unfortunate comrades resolved on running the boat on shore. Their boat was shattered in the attempt by the rocks, but happily no one perished; the crew even succeeded in hauling it on shore and preventing its total loss.

Fixed now for a time on this wild coast, our companions, in the interval of receiving succours from the ship, made several incursions into the interior. On one of these occasions, having discovered a species of almond the size of a walnut, they gathered a number of its fruit. Cooked in ashes, these almonds had a tolerably good taste, resembling that of a roasted chestnut; but all who had the misfortune to eat of them felt very bad effects from the treacherous aliment. They were affected with a troublesome vertigo, and violent retching; every one imagined himself mortally poisoned. These

omnious

ominous symptoms, however, subsided, and no one died. "For my part," says M. Levillain, who himself had eaten two or three of these almonds, "I was exceedingly sick. After having rendered the whole contents of my stomach, I continued to experience such violent and continued retchings, that I threw up two large glasses of blood, and felt the most bitter agony. Ever since" adds he "I continue to feel acute pains in the stomach." Hard fate of navigators, placed in the unfortunate circumstances I have described, of either dying of hunger, or exposing themselves to even a more agonizing death by feeding on poisonous aliments!

The pleasure of seeing the different parties sent with our expeditions all safe again on board, soon drove from our memories the fatigue and disasters we had undergone, but the inquietude which every one felt on account of the absence of the *Geographe* became more lively every day. Captain Hamelin, incapable of imagining that the commander would neglect repairing to the anchorage appointed by himself, resolved on prolonging his stay on this dangerous coast. Our gentlemen availed themselves of this to make new excursions to the neighbouring islands, and M. Bailly to encrease his observations on their geological constitution.

"The 23d June, in the morning," says this naturalist, "I failed in the great boat to visit the island Buache, at which we did not arrive before night. On our way we saw Giraud reef, distinguished by the form of one of the rocks of which it is composed, a form much resembling a shoe. This rock is a place of great resort for sea-fowl. Beyond is the island Berthollet, small, with steep shores, and barren. All these islands and rocks, dispersed at a short distance from the continent, are connected with each other by a ledge of rocks extending nearly three leagues from the land. Even the island Rottneft itself is united to this ledge of reefs: the sea breaks on many points over this ledge; and in several places there is no passage for a boat of the shallowest draught.

"The island Buache is composed of calcareous rocks more or less blended with sand, and contains many impressions of shells; the rocks lie in horizontal beds of small thickness, which appear to extend into the interior of the island and to form its scantling. Instead of constituting insulated mountains, these rocks form long continued chains, with, on each side, a uniform and tolerably steep declivity. The soil, although entirely of calcareous sand, supports a vigorous vegetation. No fresh water was any where found, nor is this matter of surprise, the nature of the soil being regarded; for the sand which forms its superficial strata imposes on a calcareous rock, the loose and porous grain of which offers no impediment to the filtration of water."

The 27th June, Mr. Bailly landed on the island Rottneft, on which he made the following observations: "The shore is covered with a number of calcareous and sandy rocks of a greyish white, and exclusively composed of the wreck of petrified shells. The hills nearest the shore are of like structure, but covered by downs of sand almost entirely calcareous. Beyond these sandy hills are sheets of water, separated from each other by small sandy hillocks, the water of them salt as the sea. The tide has also a visible effect on them: so loose indeed is the sand of the neighbouring soil, that the interesting phenomenon I have noticed may with much likelihood be ascribed to the filtration of the sea. Unless indeed this cause be assigned, it would be difficult to conceive another, as there exists no direct communication between the sea and these sheets of water. We found here two species of small shell-fish resembling the *melania*, the one of a single shell, the other bivalve, but both shells of a rose colour. The margin of the chief of these ponds was literally covered with shell-fish, which were the only animate beings we found there. Most of the ponds have steep banks, and appear to

owe their origin to the falling in or depression of the soil. In midst of the largest of them is an enormous rock standing by itself, which, by its form, site, and the horizontal disposition of its layers, evidently announces that it formerly made part of a hill which occupied the site of the pond, and was one of the chain which traverses the island Rottneft lengthwise. This conjecture is moreover founded on the exact correspondence of the solitary rock with the subsisting hills. The stone of which it is composed is wholly calcareous, white, and granulated, and interspersed with shells in good preservation, disposed, apparently, according to their families.

The period appointed by Captain Hamelin for awaiting the Geopraphe having now expired without any sight of that vessel, it was not to be presumed that we should have chance of seeing her by further procrastinating our stay, we therefore determined to steer for Endraght's Land, after leaving a flag on Rottneft Island, with a bottle and a letter for the commander, in case of his touching there. On the 28th June we made sail for our second rendezvous: but, before I pursue the history of our voyage, it seems requisite I should take a general view of that part of Edel's Land we are about to quit.

Rottneft island is of moderate height; the sides of it are chiefly irregular, indented, and composed of rocks of calcareous and sandy freestone, between which are constantly found inlets with a very white sand. The island, generally speaking, is well wooded; and the soil, though every where sandy, appeared to me to produce an abundant and vigorous vegetation. The interior, intersected by a multitude of hills, is frequently of highly graceful appearance. Unfortunately we were able to discover no soft water, and every thing leads us to conclude that it produces none. By digging pits two or three feet deep, at a short distance from the Duvaldailly ponds, some brackish water might, however, possibly be found, potable on urgent occasions.

We noticed here, in great abundance, a small species of kangaroo about two feet high: we likewise met with a second quadruped, the size of a large rat, which the Dutch navigators, in fact, took for a rat, but which, according to the observations of our naturalist M. Peron, belongs to a new and very remarkable genus, described in the zoological works of that estimable and laborious naturalist. Phocas are seen in vast numbers on the different sandy beaches of the coast; they occasionally penetrate a considerable distance into the forests. We saw some of them which were very large: they were commonly grey; but some were of a reddish and others of a black colour. The last were the smallest, and perhaps the most young; for we saw a female of an ash-grey giving milk to her sucklings, which were black. The fat of these animals is good to eat when fresh; we frequently made use of it to fry our food with, and never found it give the smallest smell or taste that was disagreeable. The fur of the majority of them is fine and thick, and consequently might become of much interest, as it would be an easy matter for a vessel to load a rich cargo of their skins.

Reptiles (snakes) on the island are pretty common; many that we found were four and five feet long, by from one and a half to two inches in diameter; their colour was that of polished steel. Rottneft Island also produces a singular species of lizard, in which my friend M. Peron found a combination of toes hitherto unobserved in the family of lizards. This one has but two belonging to the forefeet, while the hind have three.

The island is not inhabited; nor did it appear to us that it was ever visited by those who live on the main.

During our stay in the roads of the island, the wind blew fierce every point of the compass. The east wind in general was weak, and brought fine weather; the west, south-west, and north-west, on the contrary, brought on storms and rain.



Fishing yielded us a large and excellent supply of food : some days passed, however, without our being able to catch a single fish ; they appeared to me to be chiefly there when the winds were stillest and the sea most calm. It is possible on such occasions that the fish proceed to greater distance from shore, and return only when the sea, too turbulent, renders necessary they should seek shallower water and less tumultuous waves.

What also, among the fish, most occasioned our surprise, was the multitude of squali, or sharks, most of them of enormous size, which kept incessantly hovering round the ship. One which we caught had a much more pointed muzzle than the rest ; it measured sixteen (English) feet in length, in circumference nearly twelve feet, and weighed twelve hundred weight and upwards. Some that we saw even doubled the size of this. We may hence infer that in no part the sea produces monsters of this description of greater bulk, or more formidable. We likewise, but chiefly when the sea was calm, remarked many sea-serpents round the ship.

The island Berthollet is absolutely barren, and surrounded by rocks and breakers, especially in the southern part : in the north-east is a small sandy beach, where a landing may be effected.

The island Buache, much similar in appearance to Rottneft Island, is surrounded by banks which render it difficult of approach, notwithstanding it has in many parts a sandy shore. The interior is entirely covered with wood ; the trees on it are generally lofty, and the shrubs of good size ; vegetation is remarkably active, notwithstanding its constantly sandy surface. I saw partridges on the island, and crows of a smaller size than in Europe, but of excellent flavour : seals here are found in far greater plenty than on Rottneft Island.

As to the river of Swans, it cannot be considered adapted to supply the water requisite for a vessel : in the first place its mouth is difficult to enter, and its course is obstructed by sand-banks ; and secondly, in order to find fresh water, boats must proceed up the river too great a distance.

On leaving Rottneft Island we bore towards the north, designing to coast along at a short distance from shore, provided the wind should continue favourable ; but a gale springing up in our face, we were under necessity of making several tacks to the westward, which carried us out of sight of land. Still, on our eastern tack, we were frequently able to distinguish it for some time together, and thence were enabled to ascertain its general constitution, which we found, along the whole extent of this part of Edel's Land, a mournful counterpart of the monotonous coast of Leuwin's Land. As, therefore, contrary winds, and our anxiety to rejoin the *Geographe*, prevented our dedicating the requisite time to our making a complete geographic sketch of this coast, we contented ourselves with tracing the bearings necessary for the correction of the manuscript Dutch chart entrusted to us on our leaving Europe, which contained many serious errors.

The 8th and 9th of July, we saw the islands Turtel Duyf (Turtle Dove), and the Abrolhos, on which, *Pelsart* was wrecked in 1629. We fancied these last islands were placed at too great distance from the main, from which, by our reckoning, they were but eight leagues distant, and were solicitous of passing through the intervening channel, which parts them from the continent, to ascertain their exact distance from it ; but not being able to effect this point on account of the adverse winds, we merely ascertained the position of this groupe of formidable islands. When at a distance of ten or twelve leagues from the main, the Abrothos appeared confounded with it : they are of slight elevation, and bounded by red breakers, against which the sea



sea dashes with violence; but these breakers do not extend so far out to sea as is marked in the Dutch charts. Yet, as the sea was little ruffled while we were in sight of the Abrolhos, it is possible that the breakers did not seem to us to extend so far as they really do.

The 16th of July we were abreast of the Thorny or Difficult Passage, south of the island Dirk Hartighs: we coasted along that island at only two miles distance: it is bounded by a succession of breakers which run but little out to sea. By eight in the morning we reached the pass between the islands Dirk Hartighs and Dorre: the plummet indicated a fine sandy bottom, on which we cast anchor.

#### CHAP. X. — *Operations of the Naturaliste at Endraght's Land.*

[From the 16th of July to the 21st of September, 1801.]

SCARCELY had we anchored in the Bay of Sharks ere we anxiously sought if the *Geographe* lay there, or had left traces of having been at any of the neighbouring islands. The boats we sent for this purpose brought us no intelligence respecting the vessel, and we felt firmly persuaded that she had not been on this coast. Under such delicate circumstances, Captain Hamelin thought expedient to hold a council, and at his summons we all waited upon him. Here, after an exact recapitulation of the different circumstances of our voyage since we left the bay of the *Geographe*, we concluded that it was improbable any accident should have befallen our consort; and that it was not less unlikely that the *Geographe* should have returned to the south: we consequently were of opinion that we ought to wait for her here no more than a week or ten days, and in case of her non-arrival, by the expiration of that time that we should continue our course. Captain Hamelin then communicated to us his private instructions from the commander, which bore an express order for his awaiting him at the Bay of Sharks. After such instructions there was no room left to deliberate: but it was not without vexation we saw ourselves thus condemned to lose our time on these gloomy shores, in case the *Geographe* should not come to seek us, which we were fearful would be the case from what we knew of the character of our chief.

Our stay here being thus resolved upon, Captain Hamelin, for better shelter, determined to steer for the bottom of the bay, but previously he detached three men to the island Dirk Hartighs, with instructions to establish signals to inform the *Geographe* of his being there, in case that vessel should appear at the entrance of the bay.

On his return from the island Dirk Hartighs, our chief boatswain brought with him a pewter plate, about six inches in diameter, on which was rudely engraven two inscriptions in the Dutch language; the first dated the 25th of October, 1616, the second the 4th of February, 1697. This plate was found on the north side of the island, which on this account we denominated the Cape of the Inscription; it was half covered with sand, lying near a decayed oaken post, to which it appeared to have been nailed. The following is the translation of the two inscriptions:

1616.

The 25th of October, the ship *Endraght* of Amsterdam touched here, the chief owner Gilles Miebais Van Luck; the captain Dirk Hartighs of Amsterdam; he sailed the 27th of the same month: Bantum was supercargo; Janstins the master; Pieter Ecoores Van Bu . . . . . The year 1616.

1697.

The 4th of February, 1697, the ship *Het Geelvink* of Amsterdam touched here: the

captain Wilhem de Vlaming of Vlielandt; Joannes Bremer of Copenhagen, mate; the chief pilot Michel Bloem Van Estigt of Bremen: also, the dogger Nypangh, Gerrit Colaart of Amsterdam, captain; Theodorus Hermans of the same place, mate; Gerrit Gerritzen of Bremen, master, (or chief pilot): also, the galliot Het Wefeltje, Cornelis de Vlaming of Vlielandt, commander, Coert Geritzen of Bremen, master. Sailed hence with our flotilla from the Austral lands under destination for Batavia.



After copying these two inscriptions with great nicety, M. Hamelin caused a new post to be made, and sent the plate back to be reinstated on the same point of the island whence it was taken: he would have deemed it sacrilege to have kept this plate, respected for two centuries by nature and those individuals who might have observed it. He himself caused a second plate to be put up, in the north-east part of this island, on which was inscribed the name of our corvette, and the date of our arrival on these shores.

The 2d of August we quitted the island Dirk Hartighs, and proceeded to anchor under the Middle Island of Dampier; the same day I received orders to take the plan of a part of the bay, that is to say of the eastern coast of Dirk Hartighs Island, from its north-east point to the southern inclusive, and of the southern and eastern shores of the bay, after which I was to make the northern part of Middle Island, where the Naturaliste was to wait for me at anchor. In the nautical and geographical part of the voyage, I shall detail this excursion at length, here it will be sufficient I give the results.

Throughout the whole of the 2d, the calm weather prevented my making much way: I coasted the eastern side of Dirk Hartigh's land, and doubled a small but pretty remarkable point, which I called Observation Angle, (Coin de Miro); I afterwards discovered a small bay and an islet, which received the distinctive appellation of the Bay and Islet of Tetroodons (bladder-fish) from the number of fish of this description in the bay, of which our sailors caught abundance. Whales here were in such numbers that I was often obliged to change my course in order not to run foul of them; I likewise saw some tortoises, and many small sharks. I passed the night on the south point of the Bay of Tetroodons, which I denominated the Point of Refuge, for what reason will shortly appear.

In course of the 4th I doubled cape Ranfonnet, the southern extremity of Dirk Hartigh's island, and completed a survey of the Thorny or Difficult Passage, so named by Dampier, from the dangerous breakers which project from the south-west part of the island. At night-fall I landed from a small bay adjoining cape Ranfonnet, where I observed a number of holes the size of a man, which seemed so many burrows: it would be difficult to determine by what animal they were formed, the largest quadruped we distinguished on the island not having exceeded a rabbit in size.

The whole of the 5th was passed in luffing up against adverse winds; and I was constrained to seek an asylum for the night at Cape Refuge.

During the 6th the bad weather continued, and caused me to run considerable hazard in the midst of the shoals which lie at the opening of the harbour I shall presently speak of.

The 7th, after sailing all day over a sand-bank, on which there was scarcely sufficient draught of water for the boat to navigate, at night I landed opposite to a small islet, but musquet shot distant from the shore. I distinguished on the sand many footsteps of savages, yet saw none of those by whom they were imprinted. Round several extinct fires

fires we perceived abundance of shells and fish bones, but no bones belonging to quadrupeds, which induces me to conclude that the inhabitants of this part of the coast draw their chief subsistence from the sea.

Not far from the islet of which I speak, we found great plenty of pearl-oysters, but the pearls in them were none of greater diameter than half a line.

The 8th, just as we got under sail, and when but at two musquet shots from land, we saw one of the natives descend to the beach, although the day before we had in vain endeavoured to get sight of any: after observing us with attention for some time, he tranquilly returned inland. I soon after discovered an opening in the shore which seemed to me to be a river. I made several attempts to penetrate into it, but in vain: an uninterrupted bank of sand prevented all entrance, and hindered me from resolving my suspicions. This river, if such it should prove, must be inconsiderable, and will ever be uninteresting to navigators on account of its want of access. In my chart it is noticed under the name of the Supposed River.

After doubling a large cape, which I termed Cape Heirisson, I observed a tolerably large inlet, the direction of which was from north to south. On penetrating into it I found myself in a small but very fine harbour; this, however, from being closed by a sand bank on which is no more than three feet water, will ever be useless to shipping, I therefore called it Useless Harbour. The northern point of this harbour is a large promontory, named Cape Bellefin, from the physician of that name in our corvette.

The 10th, after surveying Useless Harbour, I bore towards the south to resume my operations at the spot where I began them on the 7th: towards evening, I landed and passed the night on a small barren and solitary islet. We found on it a prodigious number of sea-birds, which all took to flight with loud screams, as soon as we set foot on shore. They remained a long time hovering over our heads, and owing to their white plumage, which rendered them visible notwithstanding the darkness, they presented a singular spectacle: we killed several of them, and likewise found a number of their eggs, but neither the flesh of the fowl nor the eggs were well tasted; the eggs in particular, though fresh laid, were scarcely eatable. At day-break we left this islet, called by me, in honour of our excellent boatswain, Lefebvre.

The 11th I distinguished a new opening, towards which I endeavoured in vain to advance, the wind being directly in our teeth; I perceived, moreover, ten or twelve islets, in front of a low, sandy, and very barren point of land, south of the opening; which, from the ensign who accompanied me, I termed Girard Point. On traversing the vicinage of our place of debarkation, I perceived several habitations, and many foot-steps of the natives: some of these were prints of singularly large feet, one that I measured exceeded 12½ inches (English).

In course of the 11th, I steered towards the opening perceived the day before, which received the name of Depuch Entrance, from one of our most estimable and most unfortunate companions. I discovered also some small islets, similar altogether to those of the preceding days: I thought I descried, likewise, the mouth of another river; but, as was the case on the 8th, I found the entry into it closed by a sand-bank. Doubling afterwards Girard's Point in my course southward, I recognized several small isles, two of which, more extensive than the others, were also of less barren appearance. I landed towards evening on the largest of these two last, which I called the Island of Three Bays, on account of its triangular form, and its having on each of its sides a well outlined inlet of a sandy bottom, where small vessels may at any time find excellent shelter. This small island is tolerably wooded: its shores yield fish and oysters: its greatest extent is about a mile.

The 13th, after having made the circuit of the whole of the extremity of the deep bay, in which I had been sailing several days, I began to ascend towards the north; shortly after I discovered some new islets, and a small island, named by me Lefchenault, from one of our botanists. It was about a league in length, and in every part barren.

In the morning of the 14th, after having passed a pretty bay, I doubled a point remarkable from two islets in front of it; the point I named Moreau, from one of our midshipmen. The whole of the remainder of the day was employed in surveying the coast, which I kept in sight; and by the survey I satisfied myself that what, after Dampier, we had conceived to be an island, called by him Middle Island, is no other than a long peninsula. On arriving at Cape Lefueur, I noticed that the land turned suddenly to the north-east, and perceived the corvette *Naturaliste* anchored in a bay, which we denominated Dampier Bay, in honour of the celebrated navigator of that name by whom it was first discovered. My seeing the vessel served to confirm me in the belief that the land opposite to us was really the same we had hitherto mistaken for an island. I regained the ship in the evening, after an absence of a fortnight, during which I had made the circuit of more than two-thirds of this vast inlet, so improperly termed the Bay of Sharks. The harbour I had thus reconnoitred is nearly thirty leagues deep. I termed it H. Freycinet Harbour, from my brother, lieutenant on board the *Geographe*; and the large peninsula, which forms its eastern side, received the name of my friend M. Peron.

While absent from the ship, several events took place, of which I shall render a succinct account. On the 3d of August, Captain Hamelin came to the northward to anchor, about seven or eight miles from the peninsula Peron; the next day, a great smোক being perceived to rise suddenly from the neighbouring lands, the captain sent Messrs. St. Cricy and Baillie to examine into the cause. These gentlemen, immediately on landing, were met by about thirty savages, armed with long spears and clubs, who made a great clamour, and seemed disposed to direct their first attack on M. St. Cricy, when this officer, though with regret, discharged a musquet over their heads. The noise of the explosion, to them a noise so new, occasioned so much surprize and terror, that they all at once fled over the shore, cleared the downs, and were lost in the thickets. The smোক seen arose from a very large fire kindled by these men.

The 6th, an observatory was erected on the neighbouring peninsula, and M. St. Cricy was directed to verify the time-pieces; but the variation of temperature on land was so great, that after a few days this gentleman was obliged to return on board with the watches.

The same day, the 6th of August, our long boat, which after its damage near Rottneft Island had been only temporarily repaired, was hauled on the sand to undergo a complete refit. On this work all our carpenters and caulkers were employed: a certain number of sailors were likewise dispatched to cut down wood, and collect what was necessary for our provision. We had thus a small camp on shore, consisting of about thirty persons. The necessity of providing these with water, and the continual trouble which the transport of that indispensable article from the ship would occasion, gave birth to the plan of taking the still on shore, for the purpose of distilling salt water. "This duty," says M. Bailly, "was confided to me; and though the construction of part of the apparatus was defective, I succeeded in obtaining daily about forty quarts of water, a quantity amply sufficient for the thirty individuals on shore. Sea-water, after distillation, is not unpleasant, it has merely an empireumatic flavour, which is dissipated by exposure to the atmosphere, and is certainly preferable to the bad water so frequently used on board of ships.

"The

“The utility of this chymical apparatus, so evident from the advantage we derived from it, should cause it ever to be a part of the equipment of a vessel, especially on voyages to explore coasts where water may possibly not be found; in instances of shipwreck also, it might prove the salvation of many lives.”

The 22d of August, Messrs. Faure and Moreau were dispatched in the greater boat to explore the coast near our anchorage. They were to commence their survey from the point named by M. St. Allouarn, High Land Point, the point where mine terminated, and thence trace the eastern coast of the Peninsula Peron, till again abreast of this point; after which, they were to return to the ship. The expedition was completed by the 31st; on the arrival of our comrades, we learnt they had discovered a final bay, since termed the Bay of Attack, lying south of High Land Point. The point which bounds it southward, larger than the last mentioned, was denominated Point Guichenault, from the name of one of the two companions of M. Peron in the hardships he endured, which will be noticed as we proceed. Farther on, and constantly advancing southward, a second bay was discovered called L'Haridan Bay, its southern point being named Petit Point, from one of our unfortunate companions. Eastward of Cape Petit they discovered a tolerably large island, of which they merely examined the western coast; it was denominated, from the geographer by whom it was first distinguished, and who drew a chart of its coast, Faure Island. Hence proceeding southward, another bay or large harbour presented itself, the soundings of which were taken; it is separated from the preceding only by an isthmus, termed, from the second doctor of the *Geographe*, Taillefer.

Ascending afterwards towards the north, the party found large sand banks covered with turtle, and thence denominated Turtle Banks. Induced by the ease with which they might be taken, a landing to procure some was effected on Faure Island, and in less than three hours fifteen were turned, weighing from 122 to 147 kilogrammes\* each. Laden with this valuable cargo they returned on board. The large harbour above noticed, not so deep, but more spacious than that on the west, received its name from Captain Hamelin, with universal consent.

Our provisions were now nearly exhausted, and no intelligence of the *Geographe* had yet been received. All that depended on the captain towards effecting a junction with that vessel by a strict observance of his orders, had been done; and no hope now remained of falling in with it, but by a return to the place whence he had set out, a measure he resolved to put in immediate execution.

We in consequence got under weigh the 4th of September, first for Timor, after having passed forty-nine days in the Bay of Sharks. Of this bay there remains I should give a general description.

After Dirk Hartighs and Vlaming, the next European who visited these shores was Dampier, to whom the Western World is indebted for the first and only correct notions of these countries previous to our expedition. This skilful navigator anchored north of the Peninsula Peron, which, as we have noticed, he mistook for an island, and gave the name of Shark's Bay to the space comprized between the islands westward and the continent, without having surveyed the form of this supposed bay or its breadth. It is by no means a matter of surprize, after Dampier, commonly so exact in all his works, had given the name of bay to an assemblage of bays, harbours, and coves, which had a general appearance of what is comprehended under that denomination, that it

\* 264 to 318 lbs. Avoirdupois.

should still be preserved notwithstanding its impropriety. This is rightly done perhaps, as it prevents the ill consequences of changes in nautical names.

St. Allouarn in the *Gros Ventre*, armed *en flute*, visited these shores in the year 1772, and made himself acquainted with the land north of the peninsula. He gave the name of High Land Point to the most northern cape of this peninsula, but left this part without determining any other portion of the geography of Endraght's Land.

The result of our labours is : that we have nearly ascertained the so called Bay of Sharks to be a great bight, fifty leagues in depth, taken from Cape Cuvier northward to the southern extremity of the gulf Freycinet ; that all the eastern coast is exclusively formed by the continent, and the western of the islet Koks, the islands Dorre and Bernier, Dampier's Reef, the great island Dirk Hartighs, and a portion of the continent. All the middle part of this bight is occupied by the great continental peninsula, east and west of which the harbours of Hamelin and Freycinet are situate.

It were superfluous, after the picture of these shores presented by M. Peron in the sixth chapter, I should recapitulate their miserable sterility ; suffice it I observe, that what that naturalist has stated of the physical constitution and various productions of Bernier Island, is strictly applicable to the other islands and to the main. In every part layers of sand impose on calcareous rocks of less or greater elevation : in every part the same scarcity of fresh water exists, the same aridity, and similar destitution of vegetable productions. Like also is the sea zoology, and that of the land, save in these instances : the kangaroo is of a larger species on the continent, and the human race and the dog are found there alone. Of weak organization and very thinly scattered, man here presents the same character, with respect to his conformation and social habitude, as we shall have occasion elsewhere to notice.

Seen with a sailor's eye, this portion of Endraght's Land presents good anchorage in Dampier Bay, is capable of furnishing wood, and an estimable stock of provisions in the turtle with which it abounds. Commercially viewed, the vast abundance of whales which resort to it render safe any extent of speculation in the fishery of this animal ; and while the mariners employed might by the use of alembics, at no other expence than time, find a substitute for springs, which are wholly wanting, in the fresh water from the sea, the plenteousness of fish and turtle would secure them excellent and healthy food : pearls also might, probably, with a little industry in seeking them, be found to repay with usury the adventurer's toil.

As before noticed we sailed on the 4th of September from Shark's Bay for Timor. By two in the afternoon we gained the middle of the passage of the Naturaliste, and lost sight of the islands Dorre and Bernier at seven in the evening.

\*The 15th we distinguished New Saboo, three and half miles distant north-north-east. The 16th at dawn we made Great Saboo, and steered so as to pass between it and the islet Benzoard, which strait we entered at nine in the morning. The southern part of Great Saboo is very high ; its mountains, which decline towards the sea-shore, are covered with dwellings and beautiful forests, above the level of the generality of trees, in which tower loftily the palm and cocoa. Many of these last trees also are seen on the beach, their roots washed by the waves. We coasted so closely along this shore as to distinguish the natives on the strand. The island is about six leagues wide ; its north-west coast is still more lofty than the southern, and is also superior in fertility and beauty.

The island Benzoard, opposite to Great Saboo, where longest is but five leagues in length. It is, like its neighbour, lofty, and well covered with wood and inhabitants.

On the 20th September, at day-break, we discovered the isle Simaö to the eastward,

and beyond it, at a great distance, the lofty mountains of Timor. In the evening we had sight of the islands Tico and Rotti.

The lands of Simaö, though lofty, are less so than those of Great Saboo. This island is woody, and intersected by chains of mountains, running in different directions. The soil of the southern part is of a strong reddish colour.

Rotti likewise is elevated. The islet Tico is low, but well wooded : it appears to be surrounded by a fine flat sandy shore.

These islands, altogether, in form and in healthy vegetation by which they are covered, present the most perfect contrast when compared with the low, sterile, and desert shores of New Holland.

The 21st of September we sailed to the north of Rotti to gain the roadstead of Coopang. By a quarter past six we were near enough to distinguish a three-masted vessel at anchor in the harbour. By half past seven I was dispatched in the long boat to acquaint the governor with our object in visiting Coopang. When at distance from the ship I saw a boat steering from shore with the French flag ; it was commanded by my brother. I then learnt that the *Geographe* had been upwards of a month at Coopang, and that, from the instant of our separation in the Bay of the *Geographe*, our colleagues had experienced on our account the greatest anxiety. At length, by one in the afternoon, we anchored near our consort. Thus, two ships, designed and instructed to act together, after such a long and distressing separation, a separation totally owing to the mis-computation and bad management of the commander in chief, by effect of hazard were once again united.

## BOOK III.

FROM TIMOR TO PORT JACKSON, INCLUSIVELY.

### CHAP. XI. — *Course from Timor to the South Cape of Diemen's Land.*

[From the 13th November 1801, to the 13th January 1802.]

IN the 5th chapter we have noticed that our commander, even on the outset of his voyage, had totally inverted the general plan of operations sketched by government ; that, instead of proceeding to double the South Cape, he had gone towards that of Leuwin, and had employed the whole of his first voyage in visiting the south-western coast of New Holland. The natural course of events, and of the seasons, now, therefore, directed us to the southern extremity of Diemen's Land ; and thither-towards, in fact, did we steer on leaving Timor. Meeting long with calms and contrary winds, we experienced much difficulty in doubling Cape Leuwin, but at length this was effected in the beginning of January : at the same time, we were greeted by strong gales from the west-north-west, which carried us rapidly towards the southern coasts of Diemen's Land ; and the 13th January we discovered the foggy summits of the mountains of that great island.

In the succinct account I am about to render of the chief incidents of this irksome voyage, I deem it right to lay greater stress on the sea animals we saw, from their history presenting details equally valuable to the naturalist and the navigator. In fact, the constancy of resort of these animals to certain spots, may frequently furnish the latter with useful indications of the neighbourhood, or distance of land. The immortal Cook gave much attention to remarks of this kind ; and M. de Fleurieu, in his  
valuable



valuable appendix to the voyage of Marchand, considered it of consequence to treat especially on this subject. This part of his work, which may be regarded as an abridgement of Pelagic Zoology, is certainly of its kind the best guide an enlightened navigator, or even a naturalist can follow.

The 14th November the sky was covered with vapour, the barometer scarcely maintained itself at  $28^{\circ} 1'$ ; the thermometer was  $23,5^{\circ} *$ ; the hygrometer indicated  $97^{\circ}$  of moisture. Our numerous sick were great sufferers from this humid and hot temperature; and this day died the master's mate of the Naturaliste, M. Savary.

The 15th, we ourselves lost the unfortunate Sautier, our first journeyman gardener, an active and laborious man.

The same day we saw a water-spout in the distance, on the 16th we again saw another in the evening, and at night we passed the Great Saboo.

The 17th, in the morning, we were abreast of Benzoard Island, and, soon after passing it, discovered New Saboo. This island rises but little above the waves, which break around it: still its surface is cheerful; it seems covered with verdure, and pretty groves of trees upon it occasionally salute the eye. New Saboo is uninhabited, and is remarkable for an enormous rock near one of its points, which, at a distance, seems as if pierced by a large opening. The unhealthy temperature still continued: the condition of our sick became more serious; and at eight in the evening we lost Francis Courroyer, one of the most robust men, and one of the best steer-men in the ship.

This day numerous flights of boobies hovered about our ship, apparently from the islands we had in sight. These birds from this day constantly accompanied us to the 30th November, traversing with us the space comprized between the 10th and 15th degree of south latitude, a distance of nearly 125 marine leagues from shore. This remark confirms indeed the observations of Lapeuillée, Cook, and Forster, on the uncertainty of the indication of neighbouring land deduced from the sight of birds of this description: though it is equally certain that we never distinguished any species of booby in large flights at open sea; and the voyage I describe affords a proof of this; for after passing the islands Saboo, we sailed constantly at distance from land, yet saw, after being left by these, no others till within the neighbourhood of Diemen's Land, when their numberless legions presented themselves to our sight nearly at the same instant with the lofty mountains of that great island. With few exceptions, therefore, the appearance of boobies may be looked upon as a very probable indication of some neighbouring land; and to the navigator, who sails in unknown seas, is this indication especially valuable. The species of booby in question being new, I have described it under the denomination of *Sula Sabuensis*, (booby of the Saboo Islands).

The 18th November, Maria Hubert, gunner, died on board the Naturaliste.

The 19th, we ourselves gave to the waves one of our best sailors, called Pougens. At this period we were so much incommoded with heat, and our ratio of water was so small, that some unfortunate beings were even seen to drink their urine. All that the physician could say to induce our chief to increase for the instant the allowance of water, which might so easily be diminished on approaching to colder climates, was useless. It is painful to me to notice such matters; but, in voyages of this description, the lesson afforded by misfortune should not be omitted nor forgotten: the most celebrated navigators have justly reckoned a privation of water one of the most potent predisposing causes of scurvy on long voyages; and as we shall shortly have

to detail our participation in this malady, would it not be criminal in me to pass over a circumstance which relates so materially to this disastrous epidemic?

The 20th we saw a multitude of physals on the surface of the sea, an animal whose interesting history is given in the 3d chapter. This species appeared to me different from that seen in the Atlantic Ocean: I have described it under the title *Physalia australis*, and have made minute and numerous researches into the organization of this singular animal, the minutiae of which will be given in the zoological portion of our voyage.

The 22d November, another of our unfortunate gunners died, of the name of Mentelle. All was now consternation: twenty-five men were on the sick list, and many of them, among which were Messrs. Depuch and Mange, were very ill; happily, in proportion as we advanced towards the south, the heat became less troublesome, and our sick mended.

The 24th, we saw for the first time some storm birds, (*Procellaria pelagica*, Lin.) We saw them in 14° lat. south. The 7th December, in 17°; and the 1st January 1802, in 34°, we saw others; in the last latitude they are very rarely visible.

The 25th of November we caught a shark ten feet long, which afforded us a new specimen of the prodigious irritability of these fish. Indeed, ten minutes after its head was cut off, and its heart and viscera torn out, when, in order to wash it at the pump, the men were about to drag it forward by the tail, it raised its body with great quickness and strength, and made such violent efforts, that several men were nearly thrown down by its exertions. In our passage from Europe to the Isle of France, I had before remarked, in an animal of this genus, a still greater irritability. A shark being caught, more than *two hours* after it had been cut open, and its viscera and heart had been torn out and thrown into the sea, a sailor went to cut off its tail; but scarcely had the knife penetrated the flesh, before the shark contracted itself greatly, made several bounds, and continued to move until its tail was cut off with an hatchet.

The 26th, in the evening, on hailing the *Naturaliste* we learnt that, with respect to sick, she was not more fortunate than us; and that, independently of those we have noticed, they had lost Bourgeois of Havre, a youth equally distinguished for his estimable qualities as his excellent education: on the same day, we threw into the sea a sailor named Ives. Finally, Captain Hamelin informed us that he had still eighteen men on the sick list, among which M. Levillain, who every day became worse and worse. The bad news we received was more than equalled by that we had to communicate; after which the two vessels parted.

The 27th we saw vast numbers of flying-fish; these again made their appearance the 30th November, the 1st and 2d December, between 14 and 19° of latitude.

The 2d December we observed the first Tropic bird, (*Phæton, Æthereus*, Linn.) the most beautiful of the equatorial sea fowl; the 22d we again saw others; and, on this last day, we passed the tropic of Capricorn. Thus then this portion of our remarks corroborates what is so eloquently observed by Buffon respecting the limits of the resort of this interesting bird: "Harnessed to the chariot of the sun in the burning zone which limits the tropics, perpetually flying beneath this torrid sky, without ever wandering from the two extreme limits of the course of that brilliant luminary, it announces to navigators their approaching passage beneath those celestial signs\*."

The 11th December, in 21° of latitude south 101° east of Paris, we distinguished a petrel, the most elegant of the antarctic sea fowl, and that which has so repeatedly

\* Which are "those celestial signs?" the passage so far from meriting the epithet of elegant, borders strongly on arrant nonsense. TR.

been described in the relations of ancient and modern travellers. The 13th December, we again saw others, and as we had on the same day observed tropic birds, it results that the two birds may be seen at the same spot: the one, exclusively an inhabitant of the antarctic regions, delights in icy climates, fogs, and tempests; while the other, chained, as Buffon describes, to the chariot of the sun, cherishes the calm of the tropics and their ardent temperature. From these observations, from those of Cook, who in his second voyage, met with petrels on this side  $30^{\circ}$ , it results that the limits fixed by Linnæus for the habitation of these birds should be placed nearer to the equatorial regions than  $40^{\circ}$ , beyond which the celebrated Swedish naturalist has established their confines. We moreover observed them in great numbers the whole length of Leuwin's Land, and even in the bay of the Geographe, in  $33^{\circ}$ .

The 12th December, for the fifth time, we passed the tropic of Capricorn. Already the temperature did not exceed  $17^{\circ}$ ; the barometer from  $28^{\circ} 1'$  had progressively risen to  $28^{\circ} 3'$ . On this day we lost our master-sail-maker, a very respectable man, in esteem with the whole of the officers and crew.

The 25th we saw some grey petrels, (*Procellaria grisea*, Linn.); we distinguished others again on the 29th, 30th, and 31st of the same month, in latitude  $32^{\circ}$  and  $33^{\circ}$  S. In fact, this it is which Linnæus ascribes the northern extreme of the flight of this bird: Cook however in his voyage did not meet with them lower than at  $35^{\circ}$ .

The 29th, the sea appeared covered with janthines, the most pleasing of testaceous sea molluscs: this mollusca, by means of a branch of small bladders filled with air, swims freely on the surface of the water, as we have noticed in chap. 3d.

On this brilliant shell-fish I discovered a new species of crustacea of a beautiful ultramarine blue; I recognized it for a pinnotheris, and have described it under the name of *Pinnotheres janthinae*. This discovery is so much the more interesting as it does not appear that these parasite animals have before been noticed in univalve shells.

The same day, 29th December, was the last of the sufferings and existence of my colleague M. Levillain. To the cruel dysentery, that pursued him from our leaving Timor, was superadded a pernicious sweating fever, (*V. diaph. de Torti*), the fourth attack of which was fatal. His body was committed to the waves, which by a singular fatality had already been the sepulchre of his father and his eldest brother. This death occasioned a real sorrow in all on board the two ships; M. Levillain, in fact, was of an exceedingly mild and gentle character, and had endeared himself to every one. During his stay at Dampier Bay, he made a beautiful collection of the petrified shell-fish, which form very extensive banks on these shores, and the study of which is rendered the more interesting from the major part of them having, apparently, their living counterparts at the foot of the very rocks they form.

The 3d January 1802, a violent gale from the west-north-west succeeded the flagging winds and dead calms we had previously for some time experienced; the barometer rapidly sunk from  $28^{\circ} 3'$  to  $27^{\circ} 15'$ . The sky was covered with thick and darkish clouds; and during the night we had a copious fall of rain. On the succeeding day the wind continued to blow strong and in violent gusts, the sea was prodigiously swelled, and the pitching of the ship was very great: but the velocity with which we advanced made us bear with pleasure these appendant inconveniencies. In midst of the battling waves we saw two whales of monstrous size, which passed close by our ship; the species I was, however, unable to ascertain, as they only shewed themselves for an instant on the surface, disappearing afterwards, and occasioning a vast undulation at the spot they left:

Affurgunt longo properantes agmine fluctus  
Milecenturque vadis imis.

STAT. THEB.

The

The 5th, we found ourselves in lat.  $37^{\circ}$  south, long.  $117^{\circ}$  east of Paris. Here the great equinoctial petrel, (*procellaria equinoxialis*, Linn.) disappeared; we first distinguished it in about  $21^{\circ}$  of latitude, from which time it had been continually visible from our ship; as therefore this bird, from the limits of the torrid zone, was seen for  $18^{\circ}$  in advance towards the pole, as also the range of it is stated by Edwards, Brown, and Linnæus, to extend as far south as the latitude of the Cape of Good Hope, and even that of New Zealand, it must be allowed that no name could have been given to this species less suited to it than that of equinoxial.

The blowing weather continued during the 6th and 7th: on the latter day we were in lat.  $39^{\circ}$  south, long.  $120^{\circ}$ : the thermometer denoted  $10^{\circ}$  of heat only\*, and a lively sensation of cold obliged us to put on our winter clothing. We, on these days, for the first time, had sight of the albatross, described by Forster, of a chocolate colour, (*Diomedea spadicea*.) As early as the 4th we had seen in lat.  $35^{\circ}$ , the common albatross, (*Diomedea exilis*, Linn.) the largest of antarctic sea fowl; and of this we observed the two varieties white and brown, which possibly it might be well to regard as two distinct species, as I shall endeavour elsewhere to prove them to be. Some of these birds measured upwards of ten feet between the extremities of the extended wings. The chocolate-coloured albatross, as to Forster, seemed to us to be smaller than the common one. These animals followed our ships till within sight of Diemen's Land, and the number of them appeared to increase in proportion as we advanced towards the cold and foggy climates in which they chiefly dwell.

Many interesting animals presented themselves to my observation during the 9th. The first were those large brown gulls, (*larus catraetes*, Linn.) known to mariners by the name of shearwaters, and Port Egmont fowls. Cook saw legions of them in midst of the fields of ice which limited his hazardous voyage in  $64^{\circ}$  south. Next to the albatross, this species of gull is the most powerful sea-fowl of the antarctic regions.

The other flocks of birds seen on the 9th, were the sea-swallow (*Sterna*), of which were three species, the *sterna obscura*, Linn.; a new species described by me under the name of *sterna melanofascia*, on account of the black colour of its body; and another, alike unknown to naturalists, but which resembles the *sterna caspia*, Linn. and which I denominated *sterna caspioides*. On the same day we perceived on the waves an enormous species of sepia, possibly of the genus calmar, (*Loligo*, Lamarck) of the size of a butt or pipe; it rolled on the waves with much noise; and its long arms, spread over their surface, and in constant motion, resembled so many enormous reptiles. Each of its arms were more than six or seven feet long, by from seven to eight inches in diameter. It is, doubtless, to some animal of this family that Don Pernetty does not hesitate to attribute such prodigious dimensions, such an enormous weight that, says he, should it happen to fasten itself to the upper rigging of a ship by climbing the shrouds, it might occasion its upsetting:—a childish tale, no doubt, but very possibly derived from the appearance of some animal of extraordinary size of this genus.

The 10th January the wind still continued to blow hard; I discovered a new species of gull, which I described under the name of *larus melanopterus*, on account of its black wings. The same day we saw, for the first time, swimming on the surface of the waves, heaps of fucus giganteus. It is not without reason this sea-plant has received this specific denomination; for at an after period I saw many branches of it, not less than from two to three hundred feet long. I shall, on noticing this again,

\*  $50^{\circ}$  of Fahrenheit.

describe by what means nature is enabled to raise these long branches from the bottom of the sea, and how she qualifies them to float on its surface.

The 11th, I described, under the title of the white muzzled dolphin (*Delphinus Leucoramphus*) a new species of dolphin, which M. de Lacepede, in his history of cetaceous animals, has distinguished by my name (*Delphinus Peronii*). A phenomenon, certainly worthy of much attention, is that tendency remarked in all animals of becoming white in proportion to the nearness of their abode towards the pole. Thus, in the same regions which produce white foxes, white bears, &c.\*; the white dolphin is likewise found *Delphinus leucas*, Linn.; and in high southern latitudes, besides the *D. Leucoramphus*, which I have noticed, there exists a second species of the same genus, first observed by Commerçon, and afterwards by Forster, the body of which is white, and only retains some few spots of a blueish brown.

The 12th of January we reckoned ourselves in 44° of latitude south; longitude 141° 27' east of Paris; we were consequently not far from Diemen's Land. In the night we had a heavy fall of rain and abundance of hail; the next morning early, after a voyage of sixty-one days, we discovered the first lofty summits of that great island.

#### CHAP. XII. — *Southern Part of Diemen's Land.*

[From the 13th of January to the 17th of February, 1802.]

THE 13th of January, at day-break, we had sight of land, bearing from N. N. E. to E. N. E. At eight o'clock we were abreast of the south-west cape; shortly after we distinguished the small islands Witt, and the solitary Mewstone rock. From eight o'clock till noon we sailed rapidly along the southern extremity of Diemen's Land. At noon we doubled the south cape, the ultimate point of the world in the eastern hemisphere (towards the south). The Swilly and Eddystone rocks then bore south of us, scarcely within the scope of sight. In the mean time the looks of all were directed towards the land; we beheld with admiration those lofty mountains which nature, like so many bulwarks of granite, seemed to oppose to the raging of the ocean, the which thence stretches to the icy regions of the antarctic pole. We viewed with delight those widely spreading plateaux of the interior, rising in amphitheatric form over all its surface, and clothed in every part by deep umbrageous woods. The sea, in the interim, was rough, the wind blew with great force and in gusts from the south-west; the temperature of the atmosphere was cold, the air foggy, and long scarfs of vapor extended over the greyish flanks of the mountains and the forests. The fog was shortly after succeeded by heavy rain, by hail, and sleet; boobies, and gulls, and cormorants, and sternæ, in numberless legions from the neighbouring rocks, flew round about our ships, and mingled their piercing screams with the roaring of the angered waves; a long file of white muzzled dolphins, with many others of the cetaceous tribe, performed their evolutions around us; in short, every thing seemed to unite in impressing a degree of solemnity on our making these coasts; all announced our touching the extremity of the southern world.

The Boriel Islands were distinguished at half-past twelve, forming the most southern point of Storm Bay: The commander signaled Captain Hamelin to advance into the channel Dentrecasteaux. Scarcely was this effected before a large reef of rocks was perceived, which obliged the Naturaliste to keep close to the wind on the starboard,

\* Add to which the white crow, white sparrow, &c.

and make for sea; we followed her example. At this time there fell abundance of fleet; the gulf of wind encreased in impetuosity, and we were under necessity of reefing most of our sails; at length we succeeded in doubling the rocks in front of the Barren Islands. Steering now for Cape Brany, we threaded the channel, keeping close as possible to Cape Labillardière. At half-past four we anchored in the great bay, with twenty-three fathoms water and a muddy bottom, the island of Partridges lying east of our anchorage about a mile distant.

Of all the discoveries of modern date made on Diemen's Land, that of Dentrecasteaux Channel is, indisputably, the most singular and important. After escaping the notice successively of Jafman, Furneaux, Cook, Marion, Cox, Hunter, and Bligh, it was merely by an error which might have been fatal that it was found by the French admiral.

In the general description I have to give in another place of Diemen's Land, I shall more particularly dwell on the channel Dentrecasteaux: it will be sufficient here I should present the chief events which occurred during our stay, and our operations at this spot.

The principal object of our anchoring at this extremity of Diemen's Land being to renew our stock of water, the commander hastened the expedition of boats to different points in search of this indispensable article. M. H. Freycinet, with this view, being dispatched to the river Huon and the port of Swans, was accompanied by M. Lefueur and myself.

At nine o'clock we passed the small island nearest the entrance of the port; it is covered with verdure, trees, and shrubs, which give it the appearance of a beautiful plantation. At half-past nine we reached the port of Swans. Of all the places I saw in the course of our long voyage, this, to me, appeared the most picturesque and pleasing. The extremity of the port presents a prospect of seven tiers of mountains rising by gradation one above the other; on the right and left it is surrounded by lofty hills which terminate in a number of little promontories that form between them various small but romantic harbours. Every where the most lively vegetation greets the eye with multiplied productions; the shores are bordered by large trees, perpetually green, and so close together as to present forests almost impenetrable. Innumerable flights of paroquets, and cockatoos, of most beautiful and variegated plumage, fluttered round their summits, and the lively timouse, with its collar of ultramarine, frolicked beneath their shade. The water in this port was exceedingly tranquil, and numbers of black swans swam with majesty on its surface.

While yet absorbed in the pleasing contemplation of this picture before us, we were drawn from our reverie by cries proceeding from the right bank of the port, nearest to which bank we were. Turning our eyes to that quarter, we distinguished two savages running along the shore, each making signs of great surprise and admiration; one of them had a burning torch in his hand made of bark. We hailed them by imitating their cries, and steered for the shore; but instead of waiting for us, they plunged into the forest, and disappeared.

Pursuing our course we arrived at a small inlet, at the bottom of which was a pleasing valley, promissory of fresh water: this determined M. Freycinet on landing here. We had hardly set foot on shore before we saw two natives on the summit of an almost perpendicular hill. On our making friendly signs one of them descended with rapidity from the top of the rock, and was with us in an instant. He was a young man from twenty-two to twenty-four years of age, of a robust constitution, and without any defect but that slenderness of the legs and arms characteristic of his race. His countenance possessed nothing austere, or brutal; his eyes were lively and sparkling, and his looks expressed

expressed at once benevolence and surprise. M. Freycinet and myself embraced him, but by the indifference he shewed on the occasion, it was evident that he comprehended nothing of this token of friendship. What at first seemed most to strike him was the whiteness of our skin: anxious no doubt of ascertaining whether the whole of our body was of this complexion, he unbuttoned the waistcoats of one after the other, and opened our shirts; his astonishment on verifying the fact was signified by loud exclamations of surprise, and especially by an exceedingly quick motion of the feet.

Still, our boat seemed to engage his attention even more than our persons; and after employing some few seconds in examining us, he sprang into it. There, without regarding the sailors it contained, he seemed, as it were, absorbed in contemplation of this new subject of wonder: the thickness of the ribs and the scantling, the solidity of its structure, its rudder, oars, masts, and sails, all were examined with that silence and deep attention which are the most unequivocal signs of interest and deliberate admiration. At this instant one of the gunners, inclined no doubt to add to his amazement, presented him a glass bottle full of arrack. The pellucidity of the glass at first occasioned an exclamation of surprise from the savage, who took the bottle, and examined it for some seconds; but soon, his curiosity reverting to the long boat, he threw the bottle into the sea, without apparently other intention than ridding himself of an indifferent object; he then continued his examination of the one more interesting. Neither the cries of the sailor, who lamented the loss of the bottle of arrack, nor the preparation of one of his comrades to throw himself into the water to dive for it, appeared to cause in him the least emotion: he repeatedly attempted to push the boat off the shore, but finding his efforts vain, in consequence of its being moored to the shore, he left the boat, and rejoined us, after having given the most striking evidence we met with any where among savages of attention and reflection.

On reaching the summit of the hill I before noticed, M. Freycinet and myself found there the other native: he was a man about fifty years of age; his beard and hair was grey; his countenance, like that of the young man, frank and open; through symptoms of fear and confusion, by no means of dubious nature, we readily distinguished candour and goodness of heart. This old man, after examining both of us, with surprise and satisfaction equal to that exhibited by the other; and after verifying like him the colour of our skin, made a sign to two women who stood aside to approach; they hesitated a few seconds, after which the eldest came towards us; she was followed by the youngest, more timid and confused than the former: the one appeared about forty years old, and large wrinkles of the belly announced her the mother of several children; she was entirely naked, and like the old man, seemed kind and benevolent. The younger woman, about six or eight-and-twenty, was tolerably stout, and also entirely naked, if a skin of a kangaroo be excepted formed into a bag, in which she carried a little girl, then at the breast. Her breast, already somewhat withered, was yet of pretty regular conformation, and well supplied with milk. This young woman had a countenance interesting as that of her father and mother; her eyes possessed expression, and somewhat so lively as surprised us; such spirit indeed as we observed afterwards in no other woman of this country: she seemed moreover extremely fond of her child, and the care for it she exhibited was of that gentle and affectionate character noticeable every where as the peculiar attribute of mothers.

We loaded this interesting family with presents, but remarked in this, as in a variety of other similar instances among this people, that whatever we offered was received with the greatest indifference.

In the mean time M. Freycinet, anxious to ascertain as soon as possible the reality or



wrong of his conjectures respecting the existence of a rivulet of fresh water in the valley, set off with several men for the purpose. M. Lefleur likewise went, on a hunting excursion; while I remained with the savages, employed in observing and describing their physical constitution, and in collecting some words of their language. The young man noticing that our sailors were desirous of kindling a fire, busied himself in collecting branches of trees around us; and, with a kind of torch which he had on the ground, close to the spot where we were, he made in an instant a blazing fire; this was the more grateful to us from the cold, the thermometer not exceeding at that period 9°. At this instant, the young woman expressed singular surprise on seeing one of the sailors pull off and put a glove in his pocket; by her expressions and gestures we learnt, that she concluded the gloves to be a living skin which could be taken off and resumed at pleasure. We laughed heartily at her error; but not so at a trick of the old man which immediately followed: he had seized our bottle of arrack; and as it contained the chief of our drink, I was obliged to make him restore it; a circumstance which seemed to give him umbrage; for he soon after departed with his family, notwithstanding all my attempts to detain him longer.

I then descended to the shore: it was low water, and in less than two hours I collected more than forty new species of mollusca, shell and crustaceous fish, and fish of other kinds. Of these I shall describe several in the zoological part of the description of Diemen's Land, which, by their size, colour, economical use, or importance with naturalists, deserve particular attention.

On returning to the spot where the long boat was moored, I learnt that M. Freycinet had not been able to meet with fresh water, although he had had a long and fatiguing excursion up the valley. M. Lefleur had on his different expedition been more fortunate; he brought back with him twelve species of birds, three of which of the parrot kind, and the pretty timoufe with a blue head and neck. The sailors in our absence had prepared our frugal meal: this we speedily finished, and immediately set off for another part of the coast, where we hoped to meet with fresh water. We soon came to an abode of the natives, if that term can be applied to simple screens against the wind formed of the bark of trees, disposed in a semicircle, and leaning against a few dry branches: a shelter so fragile was evidently of no utility but as a protection against the wind; and, accordingly, I remarked that the convex side was opposed to the S. W., from which quarter on this coast it blows most constantly, with keenest sharpness, and the greatest violence. In front of this wretched *ajupa* were the vestiges of a recently extinguished fire; and large heaps of oyster-shells, and shells of the *bulis gigantia* were visible at a short distance, exhaling, owing to the remains of the animals contained within them, a most nauseous, putrid smell. On the margin of the bay were two pirogues, each formed of three rolls of bark, coarsely joined together by things of similar substance.

These screens, this recently extinguished fire, these shells, and pirogues, admitted not a doubt with us, that the family we recently had had an interview with dwelt on this part of the coast. In fact, the same individuals ere long were seen advancing towards us by the shore. As soon as they perceived us they uttered loud and joyful exclamations, and increased their speed to join us. Their number was increased by the addition of a young girl, from sixteen to seventeen years of age, a boy of four or five, and a little girl of three or four. This family was therefore composed of nine persons, the two eldest of which appeared to us to be the father and mother: the young man and his wife, who seemed to us at the same time brother and sister, the young girl their sister, and the four infants their children.

This family was then on its return from fishing: their success had doubtless been great, for almost every one was loaded with shell-fish, chiefly of the large species of *haliotis* peculiar to this coast. The old man, taking M. Freycinet by the hand, made sign to us to follow him, and led us to the wretched cabin we had just quitted. In an instant the fire was kindled, and after repeating to us several times, *médi médi* (sit down, sit down), which we did, the savages squatted on their heels, and each prepared to enjoy the fruit of their fishery. The cooking was neither tedious nor difficult: these large shells were placed on the fire, and the fish thus roasted in its cell, of which we tasted, seemed to us very tender and juicy.\*

While our good people were thus taking their simple meal, we felt inclined to treat them with music, less certainly in view of diverting them, than to notice the effect of our singing on their mind and organs. In this view we selected that hymn so unhappily prostituted during the revolution, but so full of warmth and enthusiasm, and so well adapted for its object. At first the savages seemed more confused than surprized, but after an instant of suspense they listened attentively: their meal was forgot, and their satisfaction was manifested by contortions and gestures, so whimsical, that it was burthensome to us to refrain from laughing. For their part it was equally difficult for them to stifle during the song the enthusiasm with which it affected them; but scarcely was the first strophe ended before exclamations of rapture were uttered by every one; the young man especially was almost phrenzied; he tore his hair, scratched his head with both hands, agitated himself in a hundred different ways, and repeatedly iterated his approving clamour. After this vigorous and warlike song, we gave some light and tender airs: the savages appeared to conceive their meaning; but it was easy for us to perceive that music of this description affects their organs but in a slight degree.

The meal, interrupted by our singing, being at length concluded, succeeded a far more interesting scene. The young girl which I have noticed made herself more and more conspicuous every instant, by the softness of her looks, and their affectionate and lively expression. Ourâ-Ourâ, like her parents, was wholly naked, yet void of shame on this account; and of a constitution weaker than that of her brother and sister, she was far more full of life and more impassioned. M. Freycinet, who was seated by her side, appeared to be most the object of her attention and smiles, and the least experienced eye might, in the looks of this innocent pupil of nature, distinguish that delicate shade which gives to simple playfulness a more serious and thoughtful character. Coquetry even was called to the aid of natural attraction, and Ourâ Ourâ first taught us what was the paint of these regions, and its mode of application. She took some charcoal into her hands, and crushed it in such manner as to reduce it to a very fine powder; holding this in the left hand, she with the right rubbed it over her forehead and both cheeks, and in an instant was frightfully black: what, to us especially, seemed highly singular, was the complacency with which, after this operation, she seemed to regard us, and the confidence this new ornament had impressed on her physiognomy. May we not hence conclude that an inclination for coquetry, a taste for ornament, are every where appendages of the female heart?

While these things were passing the little children imitated the grimaces and gestures of their parents, and nothing could be more curious than to see these little negroes beat the ground quickly with their feet for joy on hearing us sing: they gradually became familiarized, and, at the close of the interview, were as free as if they had known us for a length of time; every little present we made them created delight, and increased their partiality towards us: generally speaking, they seemed lively, arch, and ricksome. It is interesting to find at the extremity of the globe, and in this state of social

social organization so rudely outlined, the self-same engaging and amiable character, which with us distinguishes the first stage of life. We have already indicated the resemblance common to the women of these regions with those of our own climes : in other women here the same again will be found, and if, to these examples, be super-added the observations of the most esteemed travellers, the important consequence may be deduced that the character of women and of children is far more independent than that of man on the influence of climate, of the perfection of social order, and of the empire of physical wants than that of man.

The furniture and utensils of the family were as simple as small in number : a leaf of the fucus palmatus folded, and fastened together at the two extremities with a piece of wood, served for a vessel to drink from ; a chip of granite, as a knife to strip the trees of bark with or sharpen their spears, and a spatula of wood as an instrument for separating the shell-fish from the rock : Ourâ Ourâ alone had a bag of rushes, of an elegant and singular manufacture, which I was very anxious to obtain. As this young girl regarded me also with a very favouring eye, I ventured to beg it of her ; immediately, and without hesitation, she gave it me, accompanying the present with an obliging smile, and an affectionate speech, which I much regretted I could not understand. In return I presented her with a handkerchief and an axe ; the use of this I shewed to her brother, and it proved a source of astonishment and admiration to the whole family.

In the mean time night drew on, and we felt disposed to repair to the boat, to proceed higher up the port, where we meant to pass the night. Soon as our new friends perceived our intention, they all rose to accompany us ; but, after some observations on the part of the old man, the old mother, and the young married woman, with all the children except the oldest, remained at the hut. M. Freycinet gave his arm to Ourâ Ourâ ; the old man was my mate ; M. Lefueur was accompanied by the young man ; and M. Brue led the child. Our road lay amidst briars and underwood, and our poor savages, being wholly naked, suffered greatly : the young Ourâ Ourâ, in particular, was sadly scratched ; but, heedless of this, she boldly made her way through the thicket, chattering with M. Freycinet, and angered at her inability to make herself understood ; at the same time accompanying her discourse with sportive wiles, and smiles, so gracious and expressive, that the most finished coquetry could not have rendered them more so.

On approaching the spot where we landed, we heard the report of several fowling-pieces which occasioned a terrible fright to our kind companions ; Ourâ Ourâ especially, was dreadfully alarmed, and her fears were with difficulty removed by M. Freycinet. He had scarcely succeeded, before her trepidation was redoubled by the sudden appearance of several of our companions from the Naturaliste, whom we were far from expecting to meet. Messrs. L. Freycinet, Faure, Breton, and Bailly, who had just before been to reconnoitre the port of La Recherche, had thence proceeded to that of Swans, in their pursuit of soft water, but, like us, they had met with none. We made our friends acquainted with the kind reception we had experienced from the natives, and in consequence they loaded them with presents ; but of these none so much pleased them as a red plume of feathers, which M. Breton presented to the young Ourâ Ourâ : she leaped for joy ; called her father and brothers ; made loud exclamations ; laughed ; in short, seemed phrenzied with delight.

At length we reached the sea-side, and embarked in our two boats. Our kind Diemenese left us not for an instant ; and when we pushed off from shore, their sorrow was manifested in the most affecting manner : they invited us, by signs, to visit them

again; and, as if to indicate the spot, lighted a great fire on the little hill I have before noticed: they, most probably, even passed the night there, for we perceived the fire still burning at the dawn of day.

Thus ended our first interview with the inhabitants of Diemen's Land. The whole of what I have related is minutely exact; and assuredly it were difficult to resist the soft emotion which similar incidents inspire. The flattering confidence reposed in us by the inhabitants, the continual kind testimonials of benevolence they lavished on us, the sincerity of their demeanor, the frankness of their manners, their affecting and ingenuous caresses, all concurred to excite in us the most tender interest. The close union of the different individuals of the same family, the sort of patriarchal life we had just witnessed, made a strong impression on our minds; I saw with pleasure not to be expressed, now realized before me, those brilliant descriptions of happiness, and the simplicity of nature, of which in youth I had so often read with even new delight. Far was I, at that period, from imagining the extent of the privations and wretchedness necessarily incident on such a state.

We steered on, leaving these natives for the bottom of the port, and passed the night in a small cove, where we hoped to find fresh water: but our hopes were again deceived; and the next day we renewed our course by day-break, making towards the last creeks of the port. We shortly distinguished immense flocks of black swans, swimming with equal grace and rapidity on the tranquil waves. As the motion of our boat seemed to frighten them, we landed some marksmen, and I myself went on shore for the interior.

The spectacle is extraordinary presented by these deep forests, ancient daughters of nature and time, in which the stroke of the axe was never heard, in which vegetation, daily more enriched from its own productions, advances without impediment, unfolds itself at will; and when, at the extremity of the globe, forests of this description present themselves, exclusively formed of trees unknown in Europe, of vegetables singular in their organization and various produce, the interest they excite becomes more lively and impressive. There perpetually reign a mysterious and solemn shade, a constant cool and penetrative moisture; there crumble into dust the mighty trees from which so many shoots uprear their sturdy stems: their old trunks, now rotted by age and humidity, are covered with moss and parasitic lichens: internally they form a shelter for cold reptiles and unnumbered insects; they obstruct every avenue of the forests; cross each other in all directions; in every part, like so many barriers, oppose the progress, and multiply the perils of the traveller. Frequently do they sink under the weight of the body, and involve the adventurer in their ruins, and still more frequently does their moist and putrid bark slip from beneath his feet: occasionally they are found piled in heaps on each other, and forming natural banks from twenty-five to thirty feet in height; in other parts again fallen across ravines, they present so many bridges over rushing torrents, bridges ever to be used with caution.

To this picture of ravage and disorder, to these scenes of death and destruction, nature seems to delight in presenting for contrast whatever her creative power can shew of imposing. In every direction the surface is covered with beautiful mimosæ, superb metrosideros, and correas, till of late unknown in our country, but which now form the pride of our shrubberies. From the shores of the ocean to the summit of the highest mountains of the interior, we perceive mighty eucalypti, those giants of the southern forests, many of which are 160 to 180 feet (French) high, by a circumference of from 25 to 30, and even 36 feet. Banksiæ of various species, proteæ, embotrhia, and leptospermes, display themselves in a beautiful border, skirting the forest.

In other parts are seen the casuarina, so remarkable for its foliage, so valuable on account of the solidity and beautiful veins of its wood; the elegant exocarpos, spreading its neglected branches in a hundred different ways, like the cypress; the xanthorea, whose solitary stem rises 12 or 15 feet from its scaly and stunted trunk, a trunk which exudes in abundance an odorous resin; the cycas, the nuts of which, enveloped in a scarlet husk, are so treacherous and mortal; charming groves of melaleuca, thesium, conchyum, and evoda, all equally interesting, either on account of their graceful port, the beautiful verdure of their foliage, or the singularity of their corollæ and fruit. In midst of so many unknown objects, the mind is astonished, and can but admire that inconceivable fecundity of nature which furnishes so many distinct productions in the different climes of the world, productions constantly so rich and beautiful.

On returning to the shore, I found our sportsmen had had no success, the swans continually keeping without musquet-shot. Embarking, therefore, we followed them to the bottom of the port, where we killed two. After this, we landed again to dine, and resume our search for fresh water. While in this view, M. Freycinet, and several of our companions, proceeded along the neighbouring shore, I resolved on traversing some wide marshes, which in this part border the port of Swans. I expected, nor was I deceived, to find numerous interesting objects; but in the pursuit of them I was nearly buried in the mud. Having, at length, reached the opposite side, I made for the place where our boat was moored across a valley, between the mountains, which seemed to me likely to contain some rivulet. My conjecture was verified, and I had the satisfaction of being the first discoverer of a charming little river which contained a great number of trout of a new species, and which, running from N. N. W. to S. S. E. seemed to descend from the foot of the mountains, and terminate in the marshes, without any visible outlet to the sea. Its course was narrow, and its depth at this time did not exceed three feet; but the water was fresh and clear. After ascending for some time the banks of the river, I returned to the boat, where our party were already returned, without having found any fresh water. I imparted to them my discovery, and every one was immediately solicitous of verifying my relation. While they proceeded to the spot I designated, I ate some muscles, cooked by our sailors in sea-water, and found them excellent: all the contiguous rocks were covered with them, and here I had the good fortune of discovering a new species of pinnothere. The species of muscles also of which I partook was likewise unknown to our naturalists, as indeed were almost all the zoological productions of these shores.

My companions, on their return, informed me, that having advanced some distance into the interior to trace the source of the little river, they had seen several huts of the inhabitants, which resembled those we had before noticed; and that it appeared to them, if not impossible, yet a very difficult matter to water the ship from this river, as, previously, a firm road must be made across the marsh, to roll the casks over. Of the trout some were brought back shot by M. Lefueur. Still, notwithstanding the inconvenience of the marsh, which renders the river inaccessible, its existence is an interesting advantage for the port of Swans, which at some future period must insure its being made the site of an European establishment; for the river in question will furnish a supply of water to a colony at every season of the year. As a consequence, a road over the marsh will then be effected, and vessels may meet with plenty of water. The river we termed Fleurieu, in honour of the celebrated hydrographer of that name, the chief planner of our voyage, as laid down in chapter 1st.

It was four o'clock when we unmoored to regain our ships: at this instant the port of Swans presented itself with additional charms: the serenity of the sky, the last rays of

of the sun reflected from its waves, the forest's shade, the brown verdure of its foliage, the imposing aspect of the mountains of the interior, the last rising tiers of which were distinguished above the clouds; the numerous little creeks and inlets distributed in two parallel rows; flocks of elegant black swans majestically stemming the flood, shining paroquets, graceful titmouses, and various kinds of sparrows singing its requiem to the falling orb of day, all contributed to encrease the natural charms of this lovely spot: the looks of every one were directed towards the bottom of the port, and every one seemed to move with regret from the enchanting scene before them.

On our return, I learnt that the small boat of the *Geographe* having gone to fish at Bruny island, the natives presented themselves in great numbers; that, loaded with presents, they remained about them most of the day; that one of our midshipmen, desirous of ascertaining by actual experience the so much boasted strength of savages, proposed a wrestling match with one of them, who appeared the most robust, in which match the Diemenese was repeatedly thrown; that from this instant to that of our departure, an interval of several hours, the greatest cordiality continued apparently to subsist; that loaded anew with presents, and still without any suspicion being entertained on the part of our friends of any ill design, when, on the very point of embarking, a long spear, darted from behind a rock, penetrated above the shoulder-blade of M. Maurouard, the midshipman who had overcome the native in wrestling, and with such force as to have pierced through the flesh of the shoulder and the neck. The boat's crew, indignant at such cowardly and brutal perfidy, were disposed to pursue the savages, in order to take revenge; but in an instant they disappeared among the rocks and thickets.

Our fruitless search after water convinced us that the sources at this season of the year were dried up in this part; it therefore became requisite to try elsewhere. The 17th, we proceeded with this purpose farther down the channel, but a calm, when we had doubled Cape Ventenat, obliged us to anchor in nine fathoms, with a muddy bottom. I immediately landed with Messrs. Freycinet and Montbaazin.

At the part where we landed, this large island is but of little fertility: the trees are so wide asunder as to admit the range of the eye over a space of two or three hundred paces; the depth of soil, which is light and sandy, is inconsiderable; it imposes on granite, of which I obtained several beautiful specimens. Of zoological productions, the fruit of our search was, divers species of coleopteres, among which two new genera; some handsome lizards, resembling scinci, but differing essentially from them in the elegance of their form, and in their proportions; many beautiful conchæ, terrestrial as well as marine; but especially a quadruped, with palmated feet, of the order of nibblers, (*Rougeurs*,) the description of which will appear in the zoological part of the work.

Shortly after our return, the commander himself arrived from a slight excursion on the main, in which he had been accompanied by Captain Hamelin, Messrs. Lefchenault, and Petit. These gentlemen had again met with the natives, and the interview terminated in a violent aggression on their part. In fact, M. Petit, having taken the likenesses of several of these savages, was on the point of returning to the vessel, when one of the natives sprang on him to seize his drawings: M. Petit resisting this violence, the enraged savage caught up a branch of a tree, and was on the point of knocking down our weak companion, when he was prevented by the interposition of those who ran to his assistance. Still, far from seeking revenge, the aggressor was courted by additional presents, under expectation of pacifying his anger; but no sooner did these ferocious men perceive the party about to embark, than they entered the woods, and in an instant afterwards saluted them with a shower of stones, one of which struck our commander

commander on the back. In vain, even after this, did the savages expose themselves on shore to the fire of our people, brandishing their spears, and making threatening demonstrations; not a single shot was directed against them. "These last hostilities," says M. Lefebvre, "took place on the part of the inhabitants, without their having had the slightest provocation; on the contrary, they had been loaded with kindness and presents. I confess, I am surprized, after so many examples of treachery and cruelty repeated in all voyages of discovery, to hear persons of sense still affirm that man in a natural state is not of a bad disposition, but worthy of confidence; and that he would never be an aggressor, were he not excited by a desire of vengeance, &c. Unfortunately, many travellers have been the victims of these vain sophisms. For my part, I am of opinion, from all we saw, that man cannot be too greatly mistrusted when civilization has not yet sufficiently softened his character; and that much caution is necessary in landing in countries inhabited by men in such a state. The day after the attack I have described, Captain Hamelin, in his small boat, went to survey the shore, and approached for this purpose near enough to see whatever might be passing. It seems, the adventure of the day before had occasioned the savages some apprehension, or that they designed to assail us in case of our landing: for the captain saw thirty-six men marching along the beach in parties of five or six, one of whom in each groupe carried a bundle of spears; and at the head of this little army was a man with a fire-brand in his hand, who set fire to the bushes which marked the ground, a precaution probably thought necessary by them, both for their distinguishing us at a distance, and to deprive us of the means of concealing ourselves, and taking them by surprise.

The 19th, at six in the morning, we again made sail for the north-west port, in which we purposed anchoring, and passed in succession Satellite island, Rich Point, the bay of the Isthmus, Cape Legrand, and Gicquet Point, reaching the port by six in the evening. This little excursion between the two shores of the channel possessed somewhat pleasing and picturesque. "On whatever side," says, with truth, M. Labillardiere, "on whatever side we cast the eye, it discovered spacious inlets, in which the tempest-beaten navigator may seek a certain shelter. With astonishment did we view these immense havens, which could with ease contain the navies of all the maritime powers." On the other hand, the peaceful waves enclosed between two shores, the mountains capped with snow, the hills and valleys every where smiling with the most active vegetation, legions of birds, whose notes were distinctly heard on board the ships; naked savages, whose swarthy hordes were readily distinguished as they paced the whitish strand, all formed a highly romantic picture: but what the most astonished us was the multiplicity of fires we saw. In every part rose columns of flame and smoak; the whole of the back of the mountains which form the extremity of North-West Port, for a space of several leagues, was on fire. Thus perish these ancient and venerable forests, respected by the scythe of Time for so many centuries, that they might in more perfect state be delivered to the destructive instinct of their ferocious inhabitants.

The 20th at day-break, I embarked in a boat going to fish on Bruny Island: from this excursion I brought back more than twenty new species of fish; among which two lophies, two ostracions, one uranoscopus, a totta, a ray, two scienæ, the antarctic chimæra, a second species of the same genus, very remarkable on account of a club-shaped bone on the summit of its head, and a syngnathæ, adorned with several membranes floating freely like so many flags. I likewise collected twelve or fifteen species of new and very curious conchæ, among which a trigonia antarctica, N.; a species which hitherto was not supposed to have existence, and of which in our climates are many



many very extensive banks, in a petrified state ; the superb venus, with transversal ribs, extremely thin, friable, and light ; various phasianelli, of exquisite beauty ; an elegant trochus ; several turbot, one of which described by me under the name of eustomiris, reflects the most lively and splendid colours of the prism ; several species of patillæ, fissurellæ, oscabrions, &c. &c. At sight of this numerous and magnificent collection, my unfortunate colleague Mauge, was unable to retain his tears. Notwithstanding his exhausted and consumptive state, he resolved next day to go on shore himself to seek new specimens ; but alas ! he listened but to his zeal and courage, his dying frame was unequal to the effort. Scarcely had he reached the strand before he fainted, and was immediately carried back on board in such a state of debility that his life was for a while despaired of. This was the last instance of his zeal : he went no more on shore but to the grave.

M. Beautems Beaupré, chief author of the geographical charts of Admiral Dentrecasteaux, cannot be too highly praised, for the exactness with which the channels, the bays, and the numerous ports which it contains, are laid down. Unfortunately, the same eulogy is not due to the description of the shores of Diemen's Land, north-east of the channel, which were but superficially examined by the boats of the French admiral. As his work on this part leaves much room for amendment, we shall, in this and the succeeding chapter, complete its geographical description.

It has been seen that our instructions from the government were to ascend the different rivers of importance as high as possible ; in this part of the southern lands, the only one deserving of particular attention, was the North river, the examination of which was intrusted to M. H. Freycinet ; I was also permitted to be of the party, and we set off at three in the morning of the 24th January. Owing to calms, currents, and contrary winds, we were forced to push ourselves along the western side of the river, and take advantage of the shelter afforded by the land. At eight we cast anchor, finding ourselves unable to stem a strong current which ran towards the south : we at this time perceived on the water vast flocks of pelicans, boobies, cormorants, and divers. The lofty Table Mountain was covered with a mist, which resolved into a very thick and cold dew. At this spot the forests are much less deep than in the interior part of the channel ; they appear as if ravaged by fire.

After passing the Table Mountain, which seems to be covered only by stunted trees, and the abrupt flanks of which, furrowed by numerous torrents, resemble a rampart of basalt, we continued to ascend the river. By noon we had attained the point opposite to the large hill, where the boats of Dentrecasteaux discontinued their advance. This hill seems to be formed of horizontal strata in its upper part ; but its base appears of primitive origin. Beyond this great hill the river does indeed run deep inland, but instead of turning suddenly to the west, as described on the French map, its course is towards the north.

On doubling the point formed by the large hill, we perceived such a prodigious number of black swans that they nearly covered the river ; we killed a dozen of them, and continued our course until we grounded on a mud-bank, which, spite of all our efforts, we were unable to pass. The next day, M. Freycinet, with some men well armed, and with the requisite instruments, proceeded to survey and sketch the course of the river by land. I accompanied him till, induced by a wish of examining with more minuteness the interior of the country, I separated. It was not long ere I reached a very deep ravine, the direction of which formed a right angle with that of the river ; the right side of it was very steep, and occasioned me much difficulty in ascending it. Immediately contiguous to this natural rampart, were twelve or fourteen screens

screens of bark, such as we had seen before; a number of fires were still burning before them, and I could have no doubt of their having been abandoned by the natives, on hearing the report of the fowling-pieces occasionally fired by our comrades. In front of these huts were many bones of kangaroos and birds, and some flat stones, hot and greasy, on which they appeared to me to have broiled their meat. I collected moreover a few hatchets and knives used by the natives, made of splinters of granite, of a very fine grain, and exceedingly hard.

While yet occupied in my examination of the vicinage of these huts, I heard of a sudden some sharp cries from the bottom of a neighbouring valley. I was alone, and without arms, and consequently hastened my steps from the spot, taking a course parallel to that of the river. I soon came to a large mountain, which I ascended, and from the summit of which I distinguished the course of the North river, till lost in a high chain of mountains towards the north-west. Beyond this first tier of mountains, very lofty summits were visible, some of which seemed to me still covered with ice and snow; they were at least remarkably white, and my conjecture respecting the cause of this whiteness is founded on the observations made during the voyage of *Dentrecasteaux*, from which it results that several of the high mountains of *Diemen's Land* are covered with snow on the hottest days of summer.

After enjoying for a time the pleasing scene before me, I descended to the right bank of the river, and at half-past four reached the spot where our boat was left by *M. Freycinet* in custody of *M. Brue*, a midshipman, and some of the sailors.

At half-past seven, *M. Freycinet* and his companions returned: after having penetrated four leagues into the interior, he found himself obliged, on account of the thickets and marshes, to ascend a neighbouring mountain: "Hence," said he, "I perfectly traced the course of the river as it descended from the mountains; its general direction, to the point where it entered between defiles, was south-east-by-south, and north-west-by-north. Throughout the course of the river, the saltness of the water diminished, it is true, but in so gradual a degree, that it was only at the foot of the hill, where my survey terminated, it began to be fit to drink."

The 25th, at day-break, we endeavoured again to pass the mud-bank: we knew that it occupied a breadth no greater than two or three hundred paces, and that on the other side was sufficient depth of water to float our boat considerably beyond. Assisted by the tide and a strong breeze, we had some hopes of overcoming this obstacle; but, after seven hours of excessive fatigue, we were obliged to renounce further attempts, and make for the ship, carrying with us the mournful certainty that this river is useless to navigation in every respect, whether as a means of intercourse with the interior, or to furnish fresh water to shipping.

After spending some time in vain endeavours to enter into communication with the inhabitants, who constantly fled at our approach; and after being spectators of the horrid scene of woods destroyed by fire in our course over these ridges of mountains, we returned to our boat.

In our excursion we entered on a beautiful valley, which concomitant circumstances rendered truly enchanting. It was early in the morning, the sun shone unclouded, the air was cool and healthy; the landscape still smoked with the vapours of morn; thousands of trees of the family of myrtles, then in flower, embalmed the air with their grateful emanations, while large flocks of birds frolicked amid their ever verdant leaves. Among the birds, were the white cockatoo, with a yellow crest, in size twice as large as that of the *Moluccas*; the great black cockatoo, the under part of the tail of which is elegantly ornamented with transversal bands of a beautiful aurora colour;

our brilliant legions of southern paroquets, which, notwithstanding the cold temperature of these climates, vie in splendour with the most gorgeous species of equatorial regions; the *Xanthogastra* cuckoo; the yellow-necked black-bird; the red black-bird; the handsome tangara, of a lilac colour; the yellow-winged wood-pecker; the red-rumped bullfinch; the charming blue-necked titmouse; with others which I have before noticed.

On reaching the boat we embarked to proceed to the west of the river, where we hoped to find some of the natives, but again our efforts were vain. Landing east of the Table Mountain from a small inlet, we were spectators of a similar destruction of the woods, a like ravage of fire we had seen the day before. On this excursion I obtained but a few specimens of jasper, granite, and of another rock, which my friend Depuch esteemed to be porphyry; I also collected a variety of lichens, of extreme beauty, of fungi, and mosses, genera of plants of which, from the first instant of our arrival in the canal, I had begun an interesting collection, and which from that time I continued throughout the voyage.

On my return to the sea-shore, I followed the outline of a small inlet, the stones of the shore of which were all of basalt, mixed with volcanic scoriæ. The existence of productions of this kind in a country essentially of primitive origin, receives new interest from the petrifications of shells which I collected the day before at a height of six or seven hundred feet above the level of the sea, on one of the mountains of which I have spoken. Thus we see that, even at this extremity of the eastern world, the terrestrial globe has undergone its revolutions, and endured its great catastrophes; here, as everywhere else, it has been ravaged by the fire of volcanoes and buried beneath the waves.

On quitting our fourth anchorage, M. Freycinet had concerted with me the project of landing again on other points of the coast; but the wind, which blew from the N. E. having suddenly increased, and the sky promising a storm, we steered for the north-west port, where we rejoined our vessel at seven in the evening.

I then learnt from my laborious friend Lesueur, that his collection had been augmented by a great number of interesting fish, and that in latter excursions he had added ten new species of birds to those we possessed before.

The site of the canal Dentrecasteaux, at the extremity of the globe; the multiplicity of its magnificent ports, havens, and charming bays; the variety of its shores and bottom; must ever render it extremely abundant in fish: where, indeed, but here, can those timid legions of various descriptions spread through the volume of the great Southern Ocean, seek refuge, when the violent storms so frequent in these seas convulse the waters of every deep abyss? and, when the encroaching frost advances farther towards the line, even to the 50th degree, the shoals which seek these warmer shores must of necessity be prodigious.

At this severe season of the year, all the animals of the sea precipitately flee towards the north, seeking in a more genial clime that asylum and nourishment denied in their frozen home. The channel is filled with their multitudes, which ascend thence to Port Jackson; advance still nearer towards the equator, and offer their annual tribute to the ichthyophage Aborigines of the eastern shores of New Holland, as to us do the boreal legions of analogous tribes in Europe. Then it is that numerous shoals of the family of phocas invade the islands of Bass's Straits, and the majority of those off the eastern and western shores of New Holland; then the cetaceous genera of the south likewise make their northern migration; the ocean at times is covered with their prodigious legions. "Every where," says the captain of the English ship, the *Britannia*, in the relation of his voyage from the south cape of Diemen's Land to Port Jackson, in 1791, "every where

where the sea is full of whales ; even to the verge of the horizon, these animals are seen each driving forward, as it were, the one before it."

The twenty days which elapsed between my return from the North river and the departure of the two vessels, were most of them rendered of use by excursions longer or shorter to different points of Diemen's Land and the island Bruny. On these excursions I frequently had occasion to observe the wretched hordes of these regions, and collect interesting details respecting their manners, habits, arms, ornaments, language, &c. &c. ; but these different observations, belonging especially to the history of these people, I shall merely detail here the particulars of one of our most remarkable interviews.

On the 31st January, early in the morning, I landed on Bruny Island. A boat from the Naturaliste, and our large boat had together brought a number of people on shore, either for the purpose of fishing or collecting wood for the ships. It was low water, and in consequence I set off to examine the strand. Already was I at a distance from our boats so great as to be able no longer to distinguish them, when, after doubling a large promontory, I saw a score of savages advancing towards me along the strand. I made no hesitation to trace back my steps, too well instructed by our last accidents in the danger of similar rencounters. As I returned I met Messrs. Heirsson and Bellefin, who were amusing themselves with shooting on the skirts of the forest ; I imparted to them the occasion of my retreat : they offered to accompany me to meet the savages, with a view of holding intercourse with them, on which, secure by their arms from any ill-will they might manifest, I accepted their proffer. We were now but a few steps from the party, when of a sudden they fled, and were lost in the forest. We then climbed the downs ; and, without attempting to pursue the natives, an attempt which their extreme agility would have rendered abortive, we contented ourselves with calling, and presenting to them different articles, particularly handkerchiefs. At these demonstrations of good-will the troop hesitated an instant, and at length resolved on waiting for us. It was then discovered we had to do with women ; there was not a single male of the party. We were about to approach too near to them it seems, when one of the most aged, stepping before the rest, called out *médi, médi*, (sit down, sit down) ; they seemed at the same time to request we would lay down our arms, the sight of which apparently alarmed them.

These preliminary conditions being complied with, the women squatted on their heels ; and from that instant abandoned themselves without reserve to the natural vivacity of their character ; speaking all at once, questioning us all at a time, and seemingly criticising and mocking us ; at the same time making a thousand gestures, a thousand contortions, as singular as they were various. M. Bellefin began to sing, accompanying the words of his song with a very lively and animated gesture ; the women immediately became silent, noticing with equal attention the gestures and music of the song. As soon as a verse was terminated, some applauded with loud cries, others laughed out aloud, but the young girls, doubtless more timid, kept silence, testifying nevertheless by their gestures, and the expression of their physiognomy, how much they were surprised and pleased.

All these women, if skins of kangaroos be excepted, which some wore over their shoulders, were entirely naked ; but without appearing to give themselves any concern respecting their nakedness, they varied their attitudes in such manner, that it would be difficult to form an idea of the whimsical and picturesque appearance they presented. Their black skin, disgusting from being daubed over with the fat of seals ; their hair, short, crisp, black and filthy, and in some instances reddened with the dust of ochre ;

their face grimed over with charcoal ; their form, mostly meagre and withered ; their long and pendent breasts ; in short, the whole of their physical constitution was repulsive : from this general picture must, however, be excepted two or three young girls of fifteen or sixteen years of age, of tolerably pleasing form, of rather a graceful outline, and whose breasts were firm and well placed ; though, even in these, the nipple was rather too long and large for due proportion. These young girls had also somewhat in the expression of their countenance more ingenuous, affectionate, and mild, than was visible in the others, as if the best qualities of the soul, even among savages, were the special appendages of youth, of grace, and beauty. Of the elderly women some had a coarse ignoble countenance ; others, but these less numerous, a brutal and sombre look ; yet, in general, we remarked in all, that uneasy and dejected appearance which slavery and misfortune impress on the brow of all so unhappy to wear their yoke. Almost all of them, moreover, were covered with wounds, sad evidences of the treatment they received from their brutal husbands : one alone, of all her companions, preserved considerable assurance with much life and jollity, and she it was who imposed the conditions which I have before noticed. Soon as M. Bellefin had finished his song, she imitated his gestures and tone of voice in a very original and comical manner, to the great amusement of her companions : afterwards she began a song of her own, the notes of which were too rapid to admit of their being reduced to the principles of our music. Their singing in this corresponds with their speech, for such is the volubility of these people that it is next to impossible, as elsewhere will be shewn, to distinguish any one particular word : their utterance is a species of rolling sound, for which the languages of Europe furnish no comparative or analogous denomination.

Animated by her song, which we failed not warmly to applaud, and desirous, no doubt, of praise for other accomplishments, our merry Diemenese exhibited different specimens of dancing, some of which might be reckoned exceedingly indecent, if, in this rude state of society, man was not utterly a stranger to that delicacy of thought, that nicety of demeanour, the grateful offspring in us of the perfection of social order.

While all this was passing, I was occupied in penning the relation I have given, and taking notes of other matters which will elsewhere appear with greater interest : I attracted, it seems, the attention of the same woman who had displayed herself in the dance, for she had scarcely finished before, advancing towards me with a smiling countenance, she took from a bag of rushes, like that I begged of Ourâ Ourâ, some pieces of charcoal, crushed them, and applied to my face a coat of the customary paint of the country. I readily submitted to this flattering distinction, nor was M. Heiriffon less complaisant ; he was honoured with a similar mask. We now, in the eyes of these women, appeared striking objects of admiration ; they looked on us with satisfaction, and seemingly complimented us on our additional charms. Thus, in these distant climates, fairness of skin, of which our species is so vain in Europe, is regarded as an actual defect, a kind of deformity which requires concealment ; and a charcoal black, or the dull red of ochre are the colour of skin that most excites delight.

The respect we showed for these women, and possibly the new attractions for which we were indebted to them, seemed to augment their good-will and confidence in us ; nevertheless no inducement was sufficient to obtain their allowance of our approaching them nearer. The slightest movement on the part of any one indicative of overpassing the prescribed line, made them spring in an instant from their heels and take to flight : we were therefore obliged, in order to engage their longer stay, to conform in every thing to their wishes. After making them many presents, we at length bent our way towards where our boat was moored ; and our Diemenese dames apparently designing to

to take the same course, we set off together; but the inflexibles obliged us still to keep at distance, and forced us to follow the shore while themselves traversed the parallel downs of sand.

As they were, most probably, on their return from fishing when we perceived them, they were all laden with large crabs, *locustæ marinæ*, and various *conchæ* grilled, which they carried in their rush bags. These bags were fastened round the forehead by a band, and hung down the back: some of them were of great weight; and we sincerely lamented the lot of these poor women in having such burthens to bear.

Our walk, however, was not less entertaining than had been the interview related; from the tops of the downs, they were very jocular and played off their wiles to attract attention; to this innocent sportiveness we endeavoured as well as possible to make return, and our gesticular conversations of this description would perhaps have long continued, had not one of the women on a sudden ejaculated a loud cry, which was repeated with terror by all the rest, at sight of our boat and comrades. We endeavoured to calm their disquiet by assuring them that, far from having any thing to apprehend from our friends, they would from them receive additional presents: all was useless; and already the party was about to plunge into the forest, when the same woman, who had been the chief and almost exclusive actress in our first intercourse, seemed to pluck up resolution. Her call occasioned a moment of suspense: she spoke to the others for some seconds, but finding herself apparently unable to persuade them, she rushed from the top of the downs by herself, and marching along the shore some distance before us, with much assurance and a sort of dignity, appeared to reproach her companions for their pusillanimity. These in the end seemed ashamed of their weakness; by degrees they became more bold, and at length trusted themselves on the shore. With this numerous and singular escort was it therefore that we reached our boats, near which, by a singular chance, the husbands of these poor women had assembled a short time before.

Notwithstanding the unequivocal proofs of benevolent intentions, notwithstanding the liberality of our countrymen, doubt and mistrust, ferocity and vengeance, continued still depicted on their countenances; while even in their attitudes it was easy to distinguish, through the disguise by which they sought concealment, a somewhat forced, malevolent, and treacherous: they looked as if at the same time they dreaded our vengeance, they were mortified at the inefficiency of their divers attacks. At this unexpected meeting, all the unfortunate women who followed us, appeared frightened; their ferocious husbands expressed by their looks, on seeing them, a degree of anger and rage by no means calculated to dismiss their fears. After depositing the fruits of their fishery at the feet of these men, who divided them immediately among themselves, without offering any to the women, they went and squatted themselves down behind their husbands, who likewise were seated on the back of a large sand-down; and there, as long as the interview lasted, these unfortunate women dared not either to raise their eyes, to speak, or smile. This, however, is but the outline of the picture we shall elsewhere have to present. A few days after I had the pleasure of meeting again with the same woman of whom I have related so much: I then learnt that her name was Arrä Mäidä. M. Petit, at my request, drew her likeness, which is given in the atlas, and in every respect is an excellent resemblance. Or I mistake, or that bold and fearless character which so eminently distinguished this woman from all her companions, is there perfectly apparent. The last time I met her she had a small infant at her back.

The 3d February I again landed on Bruny Island, with three of our officers, the two Messrs. Freycinet and Montbazin: we shortly after distinguished two females who



directed their steps from the summit of a neighbouring mountain towards the sea. Anxious for a more close examination of them my companions pursued them; but scarcely had they run two hundred paces before these women, whom they thought it so easy a matter to overtake, were out of sight: this I had before predicted, having had repeated opportunities of convincing myself that the inhabitants of these shores were much more swift of foot than we. On our return to the shore we found a very large fire, lighted most probably during the night, and which yet continued to burn. Around it were carelessly strewed almost all the articles we had bestowed on the natives, and such even as they had stolen at the hazard of their life. We had previously seen others dispersed through different parts of the woods, and were satisfied that, after contenting their childish curiosity, these ignorant beings, finding our gifts, as it were, an incumbrance, threw them aside as soon as they ceased to please or amuse them.\*

In the mean time, our different objects in waiting off Diemen's were completed; that is to say, our stock of wood was collected; water, but this unfortunately rather brackish, had been obtained in tolerable abundance from the small river which falls into the bottom of the north-west port; our time-pieces had been regulated by M. Bernier, the astronomer; and finally, M. Faure was returned from his interesting excursion for the survey of the north-east part of the channel: on the result of this excursion, some observations are indispensable.

In the eastern part of North Bay, in the chart of Dentrecasteaux, is marked a second bay called Frederic Henrich's, which opens into a third called Marion Bay. The channel of communication between these two last bays being laid down distinctly in the French chart, our commander, on the instant of our reaching North West Port, dispatched our geographic artist M. Faure with directions to survey the channel, and ascertain whether or not it would admit our vessel to pass.

The survey and return furnished employment for eleven days; the results were:

1st, That the draught of North Bay, as laid down in the chart of Admiral Dentrecasteaux, is incomplete; for, towards its extremity, M. Faure discovered a basin of water of no great depth indeed, but so well sheltered as to offer in all weathers an excellent anchorage for boats and vessels of little draught; he likewise discovered a small river, north of Point Reynard, (Fox Point,) which may be ascended two leagues from its mouth; the water throughout the whole distance was very salt. M. Faure made shift however to recruit his fresh water from some small pools on the margin, or rather in the bed of the river, then nearly dry.

2d, That the second bay, S. E. of North Bay, and which is but vaguely marked in the chart of Dentrecasteaux, constitutes in fact a very secure and spacious port, with excellent anchorage in every part.

3d, That the pretended channel of communication between the bays Frederic Henrich and Marion, had no existence whatever.

4th, That consequently what in the French chart is laid down as an island, under the

\* It perhaps admits a question whether these people with such real dispositions would not have been far better qualified to play the part of that cynic, who, in answer to the request of Alexander to ask for what he pleased, desired him to get out of the sun, than could have been Diogenes himself. And, provided the contempt of this last for the courtesies, the comforts, and enjoyments of life, was any thing else than a vain assumption to render himself particular; provided, I say, a man living with civilized beings, and with such caustic humour, had truly that distaste he shewed for what polished man esteems the sweets of life, it can scarcely admit a question of whether he could not better have been placed among these savages, than at Corinth. Tr.



name of Tasman Island, is only a large peninsula, united to Diemen's Land by an isthmus, at its narrowest part but a hundred fathoms over, and about three hundred fathoms long.

5th, That this isthmus also, so far from being the division between Frederic Henrich's Bay and Marion's Bay, as laid down in the chart, divides the former from a different bay, that we shall describe, more towards the south.

6th, That the draughtsmen of Dentrecasteaux were wrong in giving the name of Frederic Henrich to the bay S. E. of North Bay, as it is physically impossible, from what is now known of it, that Tasman in his course could have seen this bay.

7th, That, for the same reason, the name of Frederic Henrich given by the French to the small island west of Joannet Point, should not be continued; as, by being connected with the pretended discovery of this portion of Diemen's Land by Tasman, it tends to perpetuate an idea which is far from just.

8th, That the name Tasman Island, employed by Dentrecasteaux, ought likewise to be corrected.

9th, Finally, it results from the explorations of M. Faure that, as there is no Frederic Henrich's Bay on the spot marked in the French chart, it must be sought for elsewhere; and, in the following chapter, we shall see it in its true place, and with its proper bearings to Marion's Bay.

For the reasons I have given we have adopted the following nomenclature for this portion of our explorations and discoveries: preserving the name given it by the French admiral to North Bay, the Great Bay, denominated improperly Frederic Henrich's Bay we call Port Buache. The island termed Tasman by Dentrecasteaux is called Tasman's Peninsula. The island west of Joannet Point in lieu of that of Frederic Henrich received the name of St. Aignant. The basin at the extremity of the North Bay is called Ransonnét Basin, and the small river, the mouth of which is north-west of Pointe Renard or Fox Point, the river Brue; the two last names being those of midshipmen on board, both one and the other equally worthy of esteem.

On the 5th February we raised our anchor, and made preparations for sailing as soon as the winds would admit. The same evening, the disk of the sun on setting was of the most beautiful and splendid red colour; the wind blew from the north-east; but, during the night, it veered round to the north, and blew in strong gusts, continuing thus until eleven or twelve the next day. The violence of these gusts of winds was such as in the space of a few hours to cause the barometer to sink seven lines and three-tenths; they, at the same time, brought on so sudden and so great a heat that the thermometer rose from  $11^{\circ}$  to  $22^{\circ}$  in the space of a few seconds\*; scarcely, in the open air, were we able to breathe; and the gusts were like blasts from a burning furnace. Shortly after, the surface of the sea appeared every where covered with fume; an immense quantity of water was drawn up into the atmosphere; and, during the whole of the remainder of the day we were surrounded as it were by a tepid vapour bath. Some individuals, among whom was our commander, attributed these great natural effects to the burning of the neighbouring forests; but, separate from the insufficiency of this explanation to account even for the instance in point, we shall elsewhere see that these burning winds are experienced on the western coast of New Holland, under circumstances perfectly similar; we shall see them again, still more formidable, on the eastern shores of the same continent, suffocate in a few seconds myriads of animals, and parch and blast as suddenly the most active vegetation. Let

us be content with observing for the instant that these inflamed winds are felt even at the southern extremity of Diemen's Land, and that there they proceed from the north. In a succeeding chapter these valuable observations, reproduced with more detail, will be found nearly allied to the physical history of the continent of which we treat.

The 17th of February we were enabled by means of a light breeze from the E. and E. S. E. to make sail, after a stay in the Channel of Dentrecasteaux of six-and-thirty days, for the south-eastern, that important extremity of Diemen's Land.

### CHAP. XIII. — *South-east Part of Diemen's Land.*

[From the 17th to the 28th of February, 1802.]

SCARCELY were we out of the channel before the wind veered to the south, and obliged us to make useless tacks throughout the day between Tarman Peninsula, Willanmez Island and the island Bruny. The night was calm; but at two in the morning a pleasant breeze from the W. S. W. enabled us to steer S. S. E. At day-break we passed Cape Raoul, bristling on every side with salient ridges, prisms, and needles of basaltic appearance. At seven in the morning we were abreast of Tasman Island: this is an enormous barren plateau, the black sides of which rise like volcanic ramparts from the bosom of the waters: its southern point, as well as Cape Raoul, is covered with immense columns, apparently of basalt. Of similar constitution is Cape Pillar, and like are the rents in its sides: but at the cape west of the rocks of Hippolytus, named by us Cape Haüy, in honour of the celebrated mineralogist of that name, the picture indeed is similar, but its horrible appearance much exceeds that of the others. At the distance of some miles this remarkable cape resembles an organ rising from the waves. The Rocks of Hippolytus form part of this large picture of disorder and fissures: they are three in number, the largest much resembling the *Coin de mire* of the Isle of France.

After doubling Cape Haüy, we found ourselves opposite to a small but pretty bay: right and left of this bay rise enormous black and sterile masses, the summits of which are ragged, and resemble the teeth of saws: at the extremity of the bay, a delightful border of verdure forms a gratifying contrast to the dingy mountains by which it is surrounded. Above the first range of these, a lofty mountain uprears its triple summit in the distance. This bay we called after Dolomieu, and pursued our course towards the north, coasting at a short distance along a precipitous shore, bathed by a sea of great depth. The barren appearance we have noticed now ceased, and mighty eucalypti raised their lofty tops above their ramparts.

A short distance north of Dolomieu Bay, a large opening presented itself, recognized by M. Faure for the Eastern bay, opposite to Port Buache, of which we spoke in the previous chapter. The identity of this bay is the more incontestible from our engineer's gendered himself, on his discovery of it after traversing the isthmus, at the bottom of this new bay, and from his having from this point taken the bearing of the Rocks of Hippolytus, and found their site that which they actually occupy with respect to the bay. We called it Monge Bay, in memory of the illustrious character to whom physics and the mathematics are indebted for so many valuable discoveries. The isthmus, which separates Monge Bay from Buaché Port seems low and sandy: beyond this isthmus, on a second level, a bound of grey mountains are seen, lower in the com-

mencement

mencement than those of the peninsula Tasman, but which afterwards rapidly rise towards the north, and constitute a second peninsula, which, in another part, we shall have to notice. A large cape rounded, and of a brownish colour, terminates Monge Bay towards the north: the whole portion of this cape, next the sea, is sterile; on its summit vegetate some tolerably greenish trees; and, in front, many reddish rocks project like so many small cones, the constitution of which should seem to be volcanic. This remarkable cape was called Cape Surville, in memory of the French navigator of that name.

From Cape Surville to Cape Frederic Henrich the lands are lofty, perpendicular at their base, but rendered like large domes at their summits: their colour is a dull green; some very few shrubs are sprinkled over their surface.

Directly north of Cape Frederic Henrich, lies the great Bay of Marion: we traversed it without halting; and, about five in the evening, cast anchor in the channel between Diemen's Land and the Island Maria, opposite the Oyster Bay.

The 19th of February, at day-break, the barge of our ship under command of M. Maurouard, was dispatched to make the tour of the Island Maria, to take a draught of it, and ascertain if it afforded fresh water. To our geographic engineer M. Boullanger, scarcely yet recovered from the illness with which he was attacked at Timor, was this work allotted. I accompanied him to examine the productions, soil, temperature, and inhabitants of the island.

Soon after we reached the most southern cape of the island, denominated by our geographers Cape Peron. In front of the cape rises a solitary granitic rock of one hundred and fifty to two hundred feet high, torn by the waves, and much resembling an obelisk: it was termed the Pyramid.

From this point the coast turns abruptly to the N. N. E.; and we proceeded along it a short distance away. It is, throughout its whole length, perpendicular, and resembles an immense rampart of granite. On some points the imagination portrays in its rocks the remnants of a line of ancient fortifications. Various species of parasitical plants, among which are lichens of a beautiful sulphur colour or a splendid red, grew on these walls, the summits of which, seen through the shrubs, appeared like the parapet of a citadel, with, in many parts, battlements and embrasures. All along this coast there is deep water; but as it is exposed to the whole fury of the south winds, blowing, unimpeded from the antarctic pole, is incessantly beaten by tumultuous waves, which break with noise against its granite walls.

When at the eastern point, called Cape Maurouard, from the laudable midshipman who then participated with M. Boullanger his geographical work, we saw the coast stretch to the N. N. W. Here the mountains rapidly decline, and in a little time the chain breaks, and forms a large bay; in this we entered, and shortly after landed on the isthmus that divides it from the Oyster Bay.

It was now two. While my companions were employed on their geographic survey of the shore, I advanced towards the north coast of the bay, and penetrated into the interior. My progress at first was slow, owing to the size and strength of the herbage; on some spots even shrubs thickly growing together, and more vigorous, interdicted advance: I was on the point of tracing back my steps, when, at a distance, I distinguished a path beaten by the natives. This I followed: in a short time trees were less frequent; and, in less than half-an hour, I reached the summit of a hillock, whence I distinguished at once the two bays of Maria Island, the isthmus by which they are separated, and the mountains of Diemen's Land, the last tiers of which were scarcely discernible amid the surrounding vapours. Divers species of pleasing gramina presented

on every side a beautiful carpet of verdure; melaleuca, correa, fagata, conchya, styphelia, and metrosideros, here and there formed charming groves, above which towered immense globular eucalypti, gigantic leptospermes, the cypress-leaved exocarpos, the hairy casuarina, the silver-leaved banksia, and a variety of other trees peculiar to these southern regions. At the foot of this hillock runs a small rivulet of sweet water, on the banks of which were distinguished many species of pteris, limodorum, a new species of everlasting with white flowers, the beautiful alettris with red flowers, the creeping parsley of these regions, and a small species of daucus, analagous in taste to our common carrot.

While absorbed by the delightful sensations inspired by this charming spot, I perceived at a distance a monument, the structure of which at once surprised me, and excited my curiosity: I hastened towards it; the following is the result of my observations.

On a wide swarth of verdure, beneath some antique caruarina, rose a cone, formed coarsely of the bark of trees inserted at bottom in the ground, and terminated at top by a large band of similar materials. Four long poles stuck in the earth, sustained and served for all the pieces of bark to lean against; these four poles seemed also calculated to ornament the building; for, instead of uniting all their upper extremity like the bark, and so forming a simple cone, they crossed each other about their middle, and then extended without the roof of the ornament. From this disposition resulted a sort of inverted tetracdric pyramid in the upper part opposed to the cone below. This contrast of form in the two parts of the building had a somewhat graceful effect, which was encreased by the following additions.

With each of the four sides of the pyramid corresponded a wide strip of bark, the two bent extremities of which were at the bottom bound together by the large band, which, as I before have noticed, united all the pieces of bark at the top of the cone: it follows that each of these four strips formed a sort of oval, least rounded at its inferior extremity, and widest and most rounded above; and, as each of these ovals corresponded with one of the sides of the inverted pyramid, it is not difficult to conceive the elegance and picturesque effect of the plan.

After looking some time at this monument, the use of which I vainly strove to fathom, I soon resolved to push my examination to a greater length: I removed several thick pieces of bark, and readily penetrated to the interior of the building. The whole of the upper part was vacant: at the bottom was a large flattened cone formed of a fine light grass laid with much care in concentric and very deep strata. With my doubt respecting the purpose of this, my curiosity encreased. Eight small bent sticks crossing each other at the summit of this cone of verdure, served to preserve its form; each of these sticks had its two extremities fastened in the earth, and kept firm in their position by a large piece of flattened granite.

So much care led me to expect some important discovery; nor was I mistaken. Scarcely had I raised the upper layers of turf, ere I perceived a large heap of white ashes, apparently collected together with nicety: thrusting my hand into the midst of these, I felt something hard, withdrawing which, I found it to be the jaw-bone of a man, and shreds of flesh still adhering to it. I shuddered with horror. Still, reflecting a little on all I had observed in the composition of the monument, I soon experienced sensations widely different from those I felt at first: the verdure, the flowers, the protecting trees, the deep bed of young herbage which covered the ashes, all united to convince me that I had here discovered a tomb.

On removing the ashes, I perceived a very black coal, expanded, friable, and light; and

and recognized it to be animal : at the same time I withdrew part of the femur with a portion of flesh ; in the flesh were still visible the larger arteries, full of blood, calcined, and in the state this fluid is, on its approximation to a resinous substance. To these bones others succeeded not less easy of recognition, vertebræ, fragments of the os humeros, the tibia, tarsus, and carpium ; all of them were much changed by the action of fire, and were readily reduced to dust : of these burnt bones I have preserved some fragments, with portions of the roasted flesh adherent to them. These bones were not, as I at first imagined, deposited on the surface ; they were collected at the bottom of a circular hole, about sixteen or twenty inches in diameter, and eight or ten inches deep. It will shortly be seen that this is not an useless remark.

I might have neglected, perhaps, to notice a final circumstance of interest as regarding the site of the tomb, if, on seeing a similar monument the next day, I had not observed the same object again. At the foot of the slope on which the sepulchre was constructed, ran a rivulet of fresh and limpid water, the presence of which, at the reigning season of the year, was equally rare and grateful. Both sides of the streamlet were carpetted by a variety of young herbage, among which several species of orchys, ophris, *richea glauca*, *apium prostratum*, and the species of carrot peculiar to these regions.

With what delight, seated on the bank of this rivulet, did I give myself up to the new reflections which such a combination of circumstances was calculated to occasion ! I said to myself, " In midst of these threatening rocks, in the deep bosom of these ancient forests, nature then has yet preserved some of her rights, since the first monument we have discovered of the unpolished and barbarous inhabitants was consecrated by herself.

Recalling next to mind the arid shores of the western part of New Holland, I reflected on the interesting bower discovered on the left bank of the river Vasse, and again said, " This monument, the only one found on its banks, was also consecrated by gratitude." Thus the first worship was inspired by nature ; the first altars were raised to filial piety, to gratitude.

I extended the first analogy between the two objects to their position : the bower of the bay of the Geographe was constructed on that salt river, which with the adjoining marshes, materially helps to support the inhabitants of those dreary regions. The tomb I had recently discovered was stationed near that portion of East Bay, where alone we had been able to find fresh water ; here also those large *conchæ*, the daily food of the people, were most abundant. The presumption that the site of the tomb was the result of deliberation, was farther strengthened by the remarks I made the next day in Oyster Bay, on a structure of similar description ; this also was placed on an eminence, at the foot of which ran a small rill of fresh water, the only one we found throughout the whole extent of this last bay. " Thus, therefore, the same principle which originated the consecration of these monuments, caused the selection of those spots for their positions which were most interesting and most dear, those spots, to which most frequently brought back by his necessities, were best calculated to renew a grateful emotion in man."

Succeeding ideas caused new reflections : I asked myself, " What can have originated this custom of burning the dead ? Separated from the rest of the world, and at its farthest extremity, these people cannot have adopted it from communication with others ; it must irrefutably therefore be an idea of their own. But, in that case, wherefore prefer this mode of disposing of the dead ? Can the preference be the effect

of chance? Or does there exist some physical reason for it, dependent on the nature of things, or the particular social organization of these men? This double question, equally important and delicate, requires in discussing it that I should take a rapid retrospect of the essential features of the inhabitants of Diemen's Land, to which, as will hereafter be displayed, those of the people who dwell on the island Maria in every respect assimilate.

Almost utterly a stranger to every principle of social organization, without chiefs, properly speaking, without laws, cloathing, or culture of any description, without any assured means of subsistence, or any established abode, man here knows no other arms, and has no other instruments than the club and the spear, both equally imperfect in themselves, and coarsely fashioned. A wanderer with his family on the shore of the sea, to that he looks for his chief subsistence; he sojourns for a longer space, and thither oftener returns, where shell-fish most abound, where he with greatest ease can collect them, and where fresh water may readiest be obtained. What I say here of the individual applies to the whole race in question; the resources of the individual fall with those of the horde to which he belongs.

These data established, one of their number shall die. He is old, respected, father of a numerous family, and surrounded by children, before whom he breathes his last. What is to become of the corpse?

Abandon it? He was their father; was kind: his abandoned corpse might become the food of wild animals! This reflection were sufficient to inspire horror even in the breast of savages. Moreover, the putrefaction of the carcase would not fail of disgusting them; and every scattered bone of a father's corpse would each succeeding instant reproach them with ingratitude, or at least be a sight at once offensive and disgusting.

Should they cast it into the sea? This at first seems the most natural and simple expedient: but, thrown back by the tides and currents, they might see again the carcase on their shores, and sometimes possibly its tainted members mingled with the shell-fish of which they make their food.

Embalm it? This is beyond their ideas, as it is beyond their means.

Bury it? This would be a labour of difficult effectuation, as well from the generally hard and rocky nature of the soil, as from an absolute want of every requisite instrument for the purpose. Still is it probable they would have recourse to this measure, did not another offer itself much more ready of effectuation, and even preferable.

This last measure is to burn it. Every thing concurs to facilitate this expedient; every thing in this is accordant with the mode of life of the inhabitant of these shores, as well as the circumstances in which he is placed. Fire, that powerful and terrible agent, their recourse on so many and such valuable occasions, cannot fail of exciting among these people some of those sentiments of veneration, consecrated with the majority of ancient nations by such numerous institutions and religious monuments. Without being deified, perhaps, as formerly it was, fire in these countries\* is regarded as something superior to the other works of nature; and these first ideas will probably have contributed not in a trivial degree to the determination of burning their dead. The requisite materials for the purpose were at hand: neither calculation nor labour were required for putting the plan in execution; no instrument was necessary; and it prevented taint and the consequent infection. But a few remains of bones would

be here after the operation, to cover which the ashes of the fire would be sufficient. The whole ceremony required only a few hours; and prejudices tended to render it reputable and sacred.

Thus then this practice of burning the dead \* does not appear to be the effect of mere chance: accordant with physical and local circumstances, these evidently were the origin of the custom; and did the nature of this work justify my prosecuting the subject further, it would be easy for me to prove that this important portion of the usages of people has more relation to the soil and its nature than is at first view apparent. Is it not, for example, worthy of remark, that those two countries most famous for embalming, and mummies, Upper Egypt and Teneriffe, are alike distinguished by the constant dryness of the soil and the atmosphere, and the facility with which different aromatic, attringent, or resinous ingredients, the essential bases of the preparations for embalming, are obtained? But, leaving further remarks on this subject, let us terminate what relates to this singular monument of Maria Island.

I was the more pleased with the discovery I had made from nothing similar having before been observed in these parts. Riche in one of his excursions had, indeed, discovered on Diemen's Land parts of bones to which the flesh yet adhered in a half calcined state; and M. Labillardiere had in consequence suspected that the inhabitants burned their dead; but this suspicion depended in a circumstance so doubtful as to be unworthy of reliance: on the contrary, this curious chapter may be reckoned nearly complete in what regards the history of the inhabitants of these regions. The draught of the tomb exactly given by M. Petit, and finished by M. Lefneur, leaves nothing to wish for respecting this monument, and the pleasing prospect afforded by the slope on which it was situate.

I have noticed a second sepulchre; this we visited the next day in Oyster Bay, opposite to East Bay, and in order to finish what relates to this subject, anticipating order and dates, I shall detail in as few words as possible what it presented peculiar to itself. Placed on a slight eminence, at the foot of which ran a rivulet of fresh water, the only one found on this bay, this latter monument immaterially differed from the one before described: but being older than the other its form was less regular; the poles which supported the pieces of bark had, as well as the bark itself, given way; and the grass which covered the ashes had undergone much change from the moisture of the atmosphere: in other respects, the bones and ashes were arranged in nearly the same manner as in the monument of East Bay. The only peculiarity it offered, and which deserves special remark, was this: on the interior of some of the handsomest and largest pieces of bark certain characters, analogous to those used by the natives in tattooing the lower part of the arm, were engraven.

To what I have before said another observation must be added: it is that from the nature of these monuments no surprize can be excited at their rarity. For the pieces of bark by which they are protected must necessarily in little time be destroyed by the action of the atmosphere, and be dispersed by the winds. The tender and delicate grass which covers the ashes must likewise soon undergo decomposition; and the ashes themselves, partly dispersed, will then shew no more than that a fire has previously been kindled on the spot; and as the bones are collected together in the bottom of the hole, they naturally remain there buried, which accounts sufficiently for none being found on the surface of the ground. Add to this the calcination they have undergone, the necessary effect of which is to render their decomposition more rapid and complete.

\* The natives of New Holland likewise burn their dead.



In the mean time my companions had finished their geographical survey, and had already been waiting for my return, when I rejoined them : we again embarked to take the soundings of the interior of the bay. It presents deep soundings almost in every part ; but from the bottom, consisting generally of live rock, the anchorage is bad : moreover, the bay is too open, and too much exposed to the fury of the winds from the south-east. Doubtless to the nature of the bottom it is that the abundance of fucus is to be attributed, which on different points of its surface form real pelagic meadows, in midst of which numberless flocks of sea-mews, gulls, divers, and cormorants seek their accustomed food.

After completing the survey of the great bay on the east, to which we gave the name Riedle Bay, in memory of the valuable naturalist buried on the island Timor, we again landed on the island to pass the night, and by four the next morning, 20th Feb. set off to continue our exploration of Maria Island.

After doubling the north cape of Riedle Bay, the direction of the land is E. N. E. to the parallel of Cape Milakén \*, the most eastern point of the island. From this to the north cape the course of it is W. N. W. The whole of the portion of the island comprised between the Eastern Bay and the North Cape is truly frightful. The coast forms a wall of granite from 320 to 430 feet (English) high : in this wall are vast caverns, in which the waves, dashing with impetuosity, make a hollow rumbling noise, similar to that of distant thunder. In every part the coast is accessible : the sea runs high and tumultuously, and the spectator trembles at the very thought of the fate of those ships driven against such ruthless shores.

This constitution, indeed, of the coast is consequent on the general position of Maria Island, here exposed to the whole ocean's rage ; and this is evident from a comparison of this side with that on the west of the island ; for, as soon as the North Cape is passed, to which from our engineer we gave the name of Cape Boullanger, the elevation of the soil decreases, and discovers beneath the shelter of Diemen's Land a long sandy beach, which is continued almost uninterruptedly to the extremity of Oyster Bay. In short, every thing eastward denotes the ravages of the waves and winds, while, on the west, the general aspect announces the tranquillity of nature, and the peaceful action of time.

In front of Cape Boullanger is a large rock, joined to Maria Island by a ledge of dangerous reefs ; a-head of this rock is a granitic islet of some dimensions, but little elevated, sterile, and which, between it and the land, has a narrow strait passable for small craft alone : we denominated this North Islet.

I have already noticed the floats of fucus which carpetted with verdure part of Riedle Bay : their extent even then caused great surprize, but on coasting along the N. E. of the island, these same vegetables occasioned us a still greater astonishment. For a very considerable distance the whole surface of the sea was covered with this submarine production ; and it was with the greatest difficulty we were enabled to disentangle ourselves from one of these floats, in the skirt of which we became enveloped ; nor till after several hours' exertion were we able to release ourselves from this unusual obstacle. These floats all consisted of one single plant, the fucus giganteus, assuredly the largest of all pelagic vegetables, as some that we measured were from 81 to 97 meters in length †. To raise and sustain these immense branches at the surface of the water nature employs a means as simple as efficacious. At intervals of space each branch produces a pretty broad leaf dentated at the edge, and crimped over its whole surface, the stalk of which, close to its union with the branch, has a pyriform or pear-shaped bladder from

\* Thus named by Captain Cox, who discovered Oyster Bay in 1789. † 265 to 318 English feet.

two to three inches in length, by about an inch in diameter at its lowest and widest part. Each of these vesicles, filled with air, acting as so many balloons, raise the branches to the surface, and support the spreading leaves on the waves. These leaves are often of considerable size; some I measured exceeding 32 to 38 decimeters in length\*.

But, not only on account of the singularity of its organization and gigantic size is this fucus deserving of notice. Torn by the violence of the tempest from their parent stems at the bottom of the sea, these floats of fucus are transported by the currents to the extremity of the bay of Riedle, are soon buried there in the sands, and greatly contribute to choak this bay, and encrease the extent of the isthmus which divides it from Oyster Bay. Thus, at this extremity of the globe, is realized the grand display of the influence of marine plants in encroachments of the land on the sea, pictured by Linnæus in the preface to his history of the mineral kingdom, but, without dwelling longer on this important matter, let us return to our voyage round the island Maria.

After doubling Cape Boullanger, we proceeded rapidly along the whole north-west coast of the island: it is low and sandy; vegetation in the neighbourhood of the coast is far from lively; but the interior displays handsome forests, and the backs of the mountains seem covered with tolerably fine trees. By five in the evening we passed Middle Islet, an islet to which we gave this name from its intermediate position between Diemen's Land and Maria Island. It is nothing but a rock of granite, about 234 meters† in diameter, and from 9 to 12 meters‡ above the surface of the water. It is naturally sterile, and the natives of the neighbourhood, being accustomed to halt here in their passage to Maria Island, from the main, have destroyed for their fires whatever vegetation it formerly bore.

Already had the obscurity of the evening begun to render our survey of the coast more and more difficult and uncertain, when we doubled Cape Lefneur, which forms the northern point of Oyster Bay: we were on the point of landing to pass the night, when we distinguished from five and twenty to thirty savages, advancing towards us, armed with long spears, and uttering loud exclamations. This numerous band was the less agreeable to us, as, much fatigued with being two days at sea, we had occasion for rest, and with such hosts should have been obliged to pass the night under arms; we therefore resolved on penetrating further into the bay, convinced the savages would not follow us. As we predicted, indeed, they continued their course westward, and soon were out of sight: after this we landed.

Early on the 21st, we continued our survey of Oyster Bay: towards the extremity it is so shallow that we were every instant in danger of grounding, though oftentimes at considerable distance from shore. Spite of this inconvenience, we completed the survey of the bay, and were about to double the fourth point, when we heard the report of a gun from one of the vessels; shortly after, this was succeeded by others, at such intervals that we could not mistake their mournful meaning. The last of my co-adjutors, M. Mauge, had ceased to live, and these announced his funeral obsequies. He died the day after our departure, universally regretted in both ships, and worthy of the grief felt for his loss, by the excellence of his character, and the zeal he had manifested in the expedition. His corpse was interred on Maria Island, at the foot of a large lucalyptus, to which a leaden plate was affixed, relating the sad detail of his death. The name of Pointe Mauge was given to the part of the island which received the remains of our unfortunate companion.

On leaving Oyster Bay, we proceeded to coast the western shore of the island, some

\* Upwards of 10 to 12 feet English. † 770 English feet. ‡ 30 to 40 English feet.

parts of which remained yet to be surveyed ; after this, we steered for the ship, which we reached in the evening of the 21st February.

The next day, at day-break, I left the ship again, with intention of traversing the isthmus, and visiting the tombs of the eastern bay. M. Petit, our draughtsman, accompanied me ; a slender boat, known to French sailors by the name of *Pousse-pied*, was allotted me, with only three men, and no other arms than a bad musquet, which M. Petit secreted in the boat. Indeed, although we had ammunition on board our vessel, a thousand times told more than sufficient for an expedition such as that on which we were sent, our commander had forbidden the taking of arms on our excursions, under pretence of too much powder being expended. Indeed, the very day previous to my departure, two carpenters belonging to the *Naturaliste*, attacked on Maria Island, were on the point of falling by the hands of the natives : yet, notwithstanding, and spite of my solicitations, the commodore was inflexible ; and as it came to an issue, whether we chose to risk unarmed an attack from the savages, or give up our intended excursion, I made no hesitation about my choice. It will presently be seen to what danger we were exposed from the perversity of the captain.

It was not long before we distinguished on the south side of Oyster Bay a great fire, which, as it must have been kindled by the savages, gave us hopes of meeting with them in that direction ; we landed at that point therefore, and our expectations were realized : fourteen natives, seated round this fire, received us with transports of surprise, admiration, and pleasure. *Medi, medi*, were the first words with which they addressed us. We seated ourselves, and they in a group about us ; the chief of the savages were armed with spears, the rest with clubs ; they laid them by their side ; and M. Rouget, the cockswain, who accompanied us, and to whom we confided our musquet, placed it on the ground, resolved not to part with it from his side, lest any native should spring upon and bear it off to the woods, a precaution rendered necessary from specimens of similar conduct on the part of the savages before met with in the channel.

Our arms thus deposited, we mutually gazed on each other for some seconds. The natives were anxious to feel the calves of our legs, and our breasts ; we complied readily in this particular with all they wished, and repeated shouts expressed their surprise at the whiteness of our skin ; but gradually they sought to carry their researches still farther ; possibly they doubted if we were of similar conformation altogether with themselves ; or, perhaps, they wished to determine our sex. Whichever might be the cause, they solicited this extraordinary examination with so much obstinacy and earnestness, as scarcely admitted of refusal. Perceiving, however, our repugnance, they no longer insisted, with respect to us, on the prosecution of their enquiry, but were absolute with respect to one of our sailors, who, owing to his youth, and his being without a beard, seemed the most fit object to verify or disprove their conjectures. This young man, at my request, consenting to gratify their curiosity, the savages seemed delighted ; but soon as they perceived him to be formed like themselves, they all at once set up such loud shouts of astonishment and joy, as perfectly stunned us.

While they were thus minutely examining us, I myself was employed in observing them with the most profound attention. Most of them were young men, from sixteen to twenty-five ; two or three seemed between thirty and five and thirty ; one alone, the eldest of all, was between fifty and five and fifty ; he alone wore the skin of a kangaroo over his shoulders : the others were perfectly naked. Generally speaking, all of them were of tolerable height for their years. Among the full grown men, one

of them was 1 meter 786 millimeters high\* ; but he was much more slender and lean than his companions : all the others differed in stature, between 1 meter 678 millimeters †, and 1 meter 732 millimeters ‡. One alone among them had his hair powdered with the dust of red ochre : he was a young man, from twenty-four to twenty-five years of age, called Bara Ooroo, of a more handsome form than the others, but with the characteristic vices of proportion of his race ; that is to say, that, with a well shaped head, broad and fleshy shoulders, an ample chest, and very muscular buttocks, all his extremities were lank and weak, especially the legs ; his belly also was too big for the rest of his body.

Their countenances were very expressive : the passions were depicted on them forcibly, as with rapidity they succeeded each other ; their features, equally flexible with their affections, change and are modified with them : frightful and brutal when they threaten ; their physiognomy, when they are suspicious, expresses inquietude and perfidy ; and, when they laugh, is gaily frantic ; and almost convulsed : in the more old, it is mournful, stern, and sombre ; but, generally speaking, in all, whatever time observed, their look has somewhat in it sinister and ferocious, which cannot escape the eye of the diligent observer, and which but too fully corresponds with their character.

After some instants dedicated to wonder, and the examination of each other, M. Petit played off some juggler's tricks, which much diverted them, and excited the most whimsical demonstrations of pleasure and enthusiasm : but nothing to them was so much a subject of astonishment, as to see M. Rouget stick a pin into the calf of his leg, without exhibiting any symptom of pain, or causing a single drop of blood to flow. At this prodigy they looked at each other in silence, as if to signify their amazement ; and afterwards simultaneously they shouted like madmen. Unfortunately for me, among the presents made them were some pins ; one of the party, solicitous of ascertaining whether I participated the insensibility they had just admired, approached silently and thrust a pin strongly into my calf. I could not refrain from crying out loudly on the occasion, and this the more from being taken wholly by surprise.

In the mean time, M. Petit and myself availed ourselves of the moment, and the good disposition at the time of the savages : while he was employed in taking the likeness of that one of the party whose regularity of features, expression of countenance, and form, struck us the most, I endeavoured, by means of the words I had been able to collect in the channel, to make them comprehend our friendly sentiments towards them ; in this conversation making great use of gestures, the meaning of which they seize with a readiness difficult for us to conceive.

Now it was that our interview became truly interesting : seated pell-mell amid the ashes of their fire, we seemed mutually satisfied with each other. I seized this occasion so favourable to my designs, and made a number of questions, confining myself exclusively to those most easy of comprehension : by such means I successively obtained an answer to the words, to gape, to burn one's self, to piss, to go to stool, to break wind, laugh, cry, whistle, blow, spit, give a box o' the ear, tie, untie, wrestle, tear, strangle, crucify, &c. &c. In general they possess great discernment : they understood with much facility the meaning of my gestures ; seemed in an instant to comprehend them, and repeated with much complacency the words I did not at first express with propriety.

I must not here omit one very singular observation I made : they seem to have no

\* 5 feet 10½ inches English.

† 5 feet 6 inches English.

‡ 5 feet 8 inches English.

idea of saluting by means of a kiss. In vain did I successively address myself to many for the purpose of making them apprehend what I desired to learn, and approach my face to theirs; they exhibited uniformly on the occasion, that surprise consequent on an unusual and unknown action, and in the same manner I had remarked among the natives of the channel Dentrecasteux. And when on my saluting them, I enquired *gouănrănă*, (what is this called), *nidegô* (I know not, I do not comprehend,) was their constant reply. The action of embracing (*caresse*) was not less strange to them: in vain by gesture did I strive to learn their expression for this token of endearment; their wonder spoke their ignorance, and *nidegô* served to confirm me in the assurance of their having no conception of its meaning. Thus these two actions, which with us appear so natural, kissing and affectionately embracing, are apparently unknown to these ferocious and barbarous people. Still, I wish not to establish as a positive fact the conjecture I here announce; but to what I have previously observed, I must add, that whether in Diemen's Land, or New Holland, I never once saw a savage embrace another of his own, or even of a different sex.

I have already noticed the changeableness of these savages, and little time elapsed ere we had a new and extraordinary exhibition of this characteristic. While M. Petit and myself were most intent on our researches, we suddenly heard loud exclamations from the interior of the forest. The savages instantly sprang up, seized their arms, and directed their looks, expressive of fierceness and surprise, towards the sea. They seemed greatly agitated; at length we distinguished one of the boats of our vessels sailing along the coast a short distance from us: I had no doubt but this boat, discerned by a kind of centinels, probably their wives, stationed for the purpose on rocks or high trees, was the cause of their agitation and alarm. Other cries were shortly after heard; and as these most likely announced the boat's leaving the shore, their fears seemed in measure to subside: I took occasion now to endeavour to make them comprehend that the men they saw were, like ourselves, friends; and that they had nothing to look for from them but kindness and presents: they apparently understood my protestations and gestures, became composed, and again laid down their arms. We now were solicitous, M. Petit of continuing to take their likenesses, and myself of collecting other words of their language; but their inquietude and distraction momentarily increased; they refused to answer my questions, nor less was the trouble M. Petit experienced in finishing the drawings he had begun.

By degrees they seemed to become more enterprising; they conversed with looks denoting great agitation, and when their eyes were directed towards us, their countenance was more sombre and ferocious than before; we hence conceived they meditated some violence; but the musquet of M. Rouget, and the aspect of this young man, one of the finest and most intrepid of our crew, appeared to keep them in awe. Whether out of curiosity, or with some perfidious intention, they were perpetually teasing him to shoot the birds perched on the neighbouring trees\*: but we were too insufficiently sure of the value of our gun, and judged our situation to be too critical to comply with their request; our denial in consequence furnished them with a fresh subject for suspicion and inquietude.

In proportion to the increase of their mistrust was their audacity. One of them

\* How comes this? M. Peron in every thing he has related gives room for belief that his party were the first Europeans seen by these savages; yet, here he makes them acquainted with the use of a musquet, which they could only know from having seen it fired and witnessed its effect: for, otherwise, they could not from its appearance and want of point, imagine it to be a weapon capable of killing birds, or of being used successfully as a missile. T. R.

insisted on having the waistcoat I wore, which by its lively colour had excited his attention. I had refused his iterated demand of it before in a manner which I thought would have prevented repetition; but, when least aware, he laid hold of it, and pointing his spear at my breast, seemed emphatically to say "Give it me, or you are a dead man." In such a critical position, to have shewn anger had been dangerous, for the wretch would undoubtedly have run me through; I therefore affected to consider his threat as a mere joke, and, seizing the point of his spear, pointed to M. Rouget, whose gun was levelled at him, at the same time uttering the simple word *mata*\*, which in their language signifies death: he understood me, and withdrew his spear, assuming as much indifference as if he had done nothing to give offence.

I had scarcely escaped from this peril before I found myself compromised in a manner if not equally fearful at least very unpleasant. One of the large gold rings I wore in my ears having excited the cupidity of another savage, he passed slyly behind me, and putting his finger through it, tugged it with so much strength as would infallibly have torn my ear had not the ring opened.

When we reflect that these men had as it were been loaded by us with presents, such as mirrors, knives, beads, pearls, handkerchiefs, snuff-boxes, &c., that I had stripped myself for them of my coat buttons, which being of gilt copper had struck them by their shining appearance, and that, without exacting return, we had submitted to all their caprices and satisfied all their wishes,—one can but wonder at their injustice and perfidy; nay, I may safely affirm that, but for M. Rouget, who kept them in check with his dreadful weapon, M. Petit and myself would certainly have fallen victims to these brutal desperadoes.

For my part, from natural disposition as much as from principle, no one could have felt more disposed than myself to bear with their trifling and caprice, but I must freely own that their every action carried with it a shew of such perfidiousness and ferocity, as revolted not only me but my companions also; and, connecting what I have recently depicted with what had previously occurred to a variety of our companions in the channel of Dentrecaux, the deduction follows that no one should trust himself among these people without sufficient means to restrain their ill-will, or repulse their attacks. But this caution is not only necessary with the race we now treat of, it is equally requisite with all savage or slightly civilized people, as is evidently shewn in all narratives of travellers. Even in those countries, the inhabitants of which are most extolled for the gentleness of their character, Europeans, when by themselves, or in slight parties, have been, in great danger, and oftentimes have fallen the victims of their liberal but misplaced confidence. A discussion on this head, however, is too little connected with this work to admit of my enlarging on the interesting particulars it might furnish, and which on some future occasion I mean to collect in one work.

Tired of the ungenerous procedure of the savages of Maria Island, I resolved on putting an end to our perilous interview; but desirous of repeating certain experiments I had made in the channel on the physical strength of the inhabitants of these coun-

\* *Mattar* in the Spanish tongue, signifies to kill. The Spaniards received the word from the Arabians. It is radically Hebrew. *מָוַת* (*mawt*) is the root, and signifies death, whence also, *mors*, *mort*, and *merite*, of the same meaning in Latin, French, and Spanish. It certainly is singular that this word, presumptively one of the oldest in the language of these savages, should have the same meaning it had with the oldest nation of which we have any authentic history, and makes one regret that M. Peron should not have given the vocabulary he notices his having obtained, as probably it furnishes other affinities to the Hebrew. Tr.

tries, I sent for the dynamometer of Regnier which I had in the boat, in hopes the figure and use of the instrument would attract the attention of the ferocious men whose powers I meant to ascertain. I was not deceived; the instrument was a subject of admiration, and I had some difficulty in preventing its being broke. After specifying its use by means of a variety of experiments made for this purpose by ourselves, we induced them to try their strength by it; already seven individuals had undergone the trial, when one of them, who had not been able to raise the needle so high as me, seemed vexed on the occasion, and, as if to give the lie direct to its statement, seized me by the wrist, and apparently desired me to disengage myself from his grasp. After some efforts, I at length succeeded: but grasping his wrist in turn with all my strength, in spite of all he could do, he found it impossible to release himself. This proof of his inferior strength seemed at once to cover him with confusion, and rouse his anger.

Hitherto the old man I have before spoken of had preserved the deepest silence; but, after what had taken place, he addressed a few words to his countrymen: without their seeming to be uttered as an order, they produced such effect that no one afterwards would touch the dynamometer.

Before we parted, I thought it right to leave them some fresh tokens of our benevolence: with this intent I approached the old man, and taking him by the hand in an affectionate manner, presented him a glass bottle, a knife, two gilt buttons, a white handkerchief, &c.; at the same time I signified that we were about to depart, but would return to visit him again with fresh presents for himself and companions. He seemed the better pleased with these last presents, from understanding we were about to go; he smiled with a look of satisfaction, but which at the same time was mingled with somewhat savage and disquiet.

While I was thus taking leave of the old man, M. Petit who was anxious to obtain a spear, had bartered a mirror for one; I also was solicitous of a club, and had already procured it, when the savages, suddenly recollecting themselves, snatched back these weapons, and all simultaneously making a loud outcry, threatened us with their weapons in such manner that M. Rouget was obliged to shout loudly in order to intimidate them, at the same time pointing his piece at the one who seemed the most inveterate against me. This was the same Bara-Ooroo, who I have before noticed was the handsomest man of the party, and whose likeness M. Petit had just completed with much nicety.

After this last act of violence we had not an instant to lose in reaching the shore: but, apprehensive lest these men should throw stones, or hurl their spears at us as we retreated, an attack of which description, from what had happened in the channel, was not new to us, we agreed that M. Petit and myself should go before, while M. Rouget with his musquet should close the rear. This precaution prevented any accident; we regained our boat, and secured her the bottom of the bay. The natives for some time kept a parallel course to that we went, but perceiving two of our boats, the crews of which were dragging for oysters, they plunged into the forests; and from that instant no one made his appearance again on this part of the coast.

I have been thus minute in the description of this long and nearly fatal interview, to enable the reader to form the better judgment of the difficulty which travellers meet with in their intercourse with savages, and to shew the impracticability of softening the natural ferocity of their disposition, or removing their ill-will towards strangers.

We now reached the extremity of Oyster Bay, and traversing the isthmus on foot, arrived



arrived at the tombs, of which M. Petit made an exact draught. After this we returned to our vessel.

While thus employed on Maria Island, three boats, dispatched nearly at the same instant, were exploring all the neighbouring parts of Diemen's Land and the contiguous islands. One of them under the command of the elder Freycinet, was ordered to proceed towards the south, and visit all that portion of the coast of Diemen's Land comprized between the cape opposite to the southern point of Maria Island, called by us Cape Bernier and Frederic Henrick's Point, where the survey of our vessels terminated. Within this space, supposing the chart of Tasman to be correct, would be comprized the Bays of Marian and Frederic Henric. We shall shortly see that the chart was in this point correct.

M. Freycinet the younger, in the second boat, was likewise to take his departure from Cape Bernier, proceed northward to the parallel of Schouten Islands, and survey that part of the coast of Diemen's Land opposite Maria Island.

Lastly, the third boat carried the engineer Faure, directed to explore Schouten Islands, which had only been cursorily surveyed by Tasman. In this last boat M. Bailli made one of the party.

We shall now detail the principal results of these three explorations :

That of the elder M. Freycinet was of eight days' duration, and furnished the following account : Between Cape Bernier on the north, and Cape Frederic Henrick on the south, lies Marian Bay. Exposed to all the winds between the south and east, it is, properly speaking, an open roadstead of little security, notwithstanding it has almost every where sufficient depth of water, and an excellent bottom. All the northern side of this bay, from Cape Bernier to Surf Point, consists of high lands ; the coast may be neared pretty close : it also presents many small coves in which boats may find shelter, provided the east winds do not blow with too great violence. From Surf Point to the entrance of Frederic Henrick's Bay, of which I shall speak shortly, extends a sandy beach, extremely flat, and describing a pretty regular curve. "The east wind, which blew at this time," says M. H. Freycinet, "occasioned on this long shore a dreadful surf: the sea broke with violence, and was whitened with foam the space of several cables' length. Still, desirous of keeping near to shore as possible, I stood in, but in a little time was surrounded by such high and heavy waves that I was under necessity of getting further out with precipitation."

At the extremity of Marian Bay is an opening which communicates with that of Frederic Henrick. This opening is narrow, and its eastern point is defended by breakers, against which the sea dashes with great force : still it is not in reality so dangerous as it seems ; and M. Freycinet found in it three fathoms water. The interior of the bay is replete with shallows and extensive sand-banks, which at low water are dry. The greatest depth of water occurs in the southern part, and this consequently is the best place of anchorage. In the south east is a small river which brought down at this time a pretty considerable volume of fresh water ; this also is of greater value, as in the hot season of the year, that which then reigned, all the neighbouring parts of the continent and the islands are nearly destitute of this article. The consequence of this bay is further encreased by the multitudes of fish which swarm in it, and by the facility with which wood may be procured ; unfortunately it is ill suited for large vessels, on account of the sand-banks by which it is choked, and on which there would be danger of their running aground.

Combining these last labours of M. H. Freycinet with those of the engineer Faure, of which we have spoken in the preceding chapter, it appears,

1st. That Frederic Henrick's Bay, with respect to its position, is correctly laid down by Tasman.

2d. That what is denominated Maroin Bay is only a road in front of Frederic Bay, to which Tasman assigned no distinguishing name.

3d. That Frederic Bay is perfectly a different bay to that which under this name is described in the chart of Dentrecasteaux, and which we termed Buache Port.

4th. That the bay and port are divided by an isthmus of sufficient breadth and height to prevent the sea passing over it at any time.

5th. That in this spot no trace is seen of the channel of communication marked in the chart of Dentrecasteaux.

6th. That the chart of Flinders, more exact than the foregoing, inasmuch as it notices no such channel, is still defective in the position it assigns to Frederic Henrick Bay, which, according to the English navigator of whom I speak, is the same as the North Bay of the French chart. The position here given to it, however, is such as is refuted by a mere glance at the route and chart of Tasman.

7th. That the charts of Tasman and Marian are more exact in the delineation of this portion of Diemen's Land than those of modern navigators.

8th. That Marion in this part made no new discovery; for, as well as it would have been impossible for Tasman to have recognized Frederic Bay, and take that survey of it, for which we are indebted to him, without traversing and consequently discovering Marion Bay, this bay itself, as may be seen by comparing the draught of it by Tasman with our own, is more correctly laid down by him than by Marion. However, as custom has sanctioned these denominations, we shall confine the distinction of Frederic Henrick Bay to the small port visited by M. H. Freycinet; and that of Marion Bay to the large roadstead in front of the port, comprized, as we have before noticed, between Cape Bernier on the north, and Frederic Henrick Cape southward.

9th. And, finally, that the extent between Monge Bay, Buache Port, and Marion and Frederic Henrick Bays, forms a new peninsula, which, on the south, is united to that of Tasman by the isthmus described in the preceding chapter, and which, towards the north, is connected with the residue of Diemen's Land by the last mentioned isthmus. This second peninsula, to which we gave the name of Forester's Peninsula, is composed of high lands, which almost suddenly slope towards the two isthmuses: on this singular conformation we must make some short remarks.

Casting the eye over the chart of the southern extremity of Diemen's Land, one is surprized at first at the number of isthmuses on this eastern coast: thus, Bruny isthmus, North isthmus, those of Forestier and the island Maria, are, as it were, heaped together; and another again will shortly be noticed, composed of the land described by previous navigators as islands under the name of Schouten. All these isthmuses are extremely low and narrow, and present a truly remarkable contrast to the contiguous lands, mostly consisting of high mountains; from this circumstance it follows that, in order not to be mistaken as to the real form of the coast, the survey must be made at but a short distance, as when afar off, the existence of these isthmuses cannot be distinguished: to this also is to be attributed the errors with respect to them of Tasman, Furneaux, and Flinders, and that likewise in the chart of Dentrecasteaux. It will readily be conceived, in fact, that the engineers of this last navigator not being able to advance yond Fox Point, — and being there at too great distance to perceive the very low isthmus at the extremity of Frederic Bay, or any other land, as indeed there is only the open sea beyond, — it will, I say, be readily conceived that they might, nay, that they ought to conclude on the existence, of a direct communication between the North Bay, in which

which they were, and the Frederic Bay of Tasman, which they knew to lay in that direction. Thus it is that physical and geological observations, too much neglected by common geographers, are capable oftentimes of throwing a light on, and occasionally of solving, difficulties of this description, delicate in themselves, and of utmost importance to navigators.

The mission of M. Freycinet the younger was not of equal difficulty with that I have last described; nor was it of long duration, as this officer, who left the ship on the 20th, returned on the evening of the 22d. At a short distance north of Cape Bernier, he discovered an extensive salt marsh which, by a narrow opening, choked with shingles, communicates with the sea. Beyond this marsh, and opposite to the northern islet, he found a small port, at the bottom of which many rivulets discharged a brackish water; some of these rivulets, however, seemed to him likely in the rainy season to furnish fresher water: this little cove he named Port Montbazin. He thence pursued his course towards the north: shortly he found himself abreast of a large cape, which he denominated Bougainville. Here the coast takes a direction north-north-west, and forms, in a parallel with the southern extremity of Schouten Island, a small creek, of tolerable depth, but every where exposed to winds from the south-by-east. Here terminated the survey of M. L. Freycinet: remains now we should give the result of the mission of M. Faure to the so named Schouten islands.

\* North of Maria Island, on all the general or partial charts of these regions, is laid down a long chain of islands, which, under the name of Schouten islands, project along the eastern side of Diemen's Land, leaving a wide channel, or rather a long strait, between them and the land. Discovered first by Tasman in 1642, they were more exactly noticed by Furneaux in 1770; and Captain Flinders in 1799 coasted along them at a short distance. The united labours of these navigators so justly celebrated did not admit of our doubting the land here described was really divided into islands; but, as no one of the three had penetrated the strait between them and Diemen's Land, M. Faure was directed to effect its survey.

After coasting along Diemen's Land till abreast of Cape Bougainville, in course of the 19th of February, in the morning of the 20th he steered for the most southern of these supposed islands. By eleven, he perceived an islet directly in his track: "We then," said M. Bailli, "began to distinguish a very strong and highly disagreeable smell, which gradually augmented the nearer we approached the islets; when, but at short distance from its shores, we found them covered with seals, (phocas). The larger, which were of a yellowish colour, were couched on the higher parts; while the smaller, which seemed to be black, filled the cavities in the lower part of the rock. The shore was rather steep, so that, when one of the seals in the upper part wished to descend it glided down generally, and bore before it those in its way below. This rock is surrounded by very deep water; the plummet, at two boats' length distant, giving fourteen fathoms, with a bottom covered with sea-weed, goemons and fucas, which rose to the level with the surface.

At four in the evening, M. Faure landed from a small inlet adjoining the south-west cape of Schouten island, which received his name. "This island," continues M. Bailli, "is entirely formed, on its eastern side, of high and very steep granitic mountains, rarely covered with vegetation, and most commonly presenting the bare rock. The western coast, more uniform, and of gentler slope is formed of horizontal layers: covered with wood, it is of pleasing appearance, and is easy of access from a sandy beach in front." E. S. E. of cape Faure are seven small rugged islets, projected in front of the S. E. point of Schouten island: we called them Taillefer islets, from the worthy physician of whom we soon shall have to make particular mention.

After surveying the whole western coast of Schouten island, in course of the morning of the 21st February M. Faure found himself opposite to the little strait which separates this island from a second land, which he then took for another of the Schouten islands. "This channel" says the companion of M. Faure, "is very deep, presents in every part sufficient room for tacking between high and very steep shores, at the base of which there is not less than eighteen fathoms water." We have named it in our chart the Strait of the Geographe, in memory of the vessel to which we owe the survey of this portion of Diemen's Land.

On crossing the strait of the Geographe, M. Faure intended to make towards the north to reconnoitre the eastern coast of Schouten islands, and afterwards enter the supposed strait between them and Diemen's Land: but vainly was the whole of the 21st and 22d employed in search of this strait; so that, finding no passage whatever, he was obliged to return on the 23d to the channel of the Geographe, in order to coast on the western the same lands of which he had surveyed the eastern sides. About noon he landed from a small inlet, on the southern extremity of what he then deemed the second of the Schouten islands; and as the weather from the evening of the day before had been tempestuous, he resolved on halting here till next morning, and this the more willingly, from the crew, who had not been on shore for two days, being exhausted with fatigue.

M. Bailli availed himself of the landing to make some useful observations on this point. "High granitic mountains," says he, "the summits of which were almost entirely naked, form the whole of the eastern coast of this part of Diemen's Land; they rise suddenly from their base; the lands which unite them to each other are extremely low, and imperceptible a short way out at sea. To this singular constitution is undoubtedly owing the errors of those navigators by whom we had been preceded in these parts, and by whom those mountains were mistaken for so many islands. We have before remarked that the eastern shore of these pretended islands is steep, wild, and sterile; and that of the west low, pleasing, and covered with wood: this contrast, noticed as well by my friend M. Peron in the island Maria, is assuredly a consequence of the same physical cause. This part is also occasionally inhabited by man; for in many parts we distinguished vestiges of fires and meals."

The 24th February was passed in ascending towards the north, parallel with the western coast of Schouten islands: but impetuous squalls springing up from the south scarcely allowed sufficient time for our travellers to seek refuge to leeward of a small island, which, from its value at this critical instant, they termed the Isle of Refuge. "It is," according to Mr. Bailli, "about a quarter of a league from the shore, and consists merely of a granitic flat, which rises but a few feet above the water; is covered with trees, but affords no trace of fresh water."

The survey of the western coast was completed on the 25th, and any doubt respecting its constitution which might before have existed was by that time completely removed. In fact, after making in succession the circuit of several inlets of tolerable depth, divided from the eastern sea by low and sandy necks of land, on one of which they discovered a large pond of fresh water, our companions found themselves at the extremity of a bay, the coasts of which they carefully surveyed. "This bay," says Mr. Bailli, "runs fifteen miles in land, and is four leagues wide at its mouth: the bottom is good, and the soundings constantly from 5 to 14 fathoms: it is sheltered from all winds, excepting those from the S. by E. to S. E. and is covered in great measure even from these by Maria Island and the Isle of Seals. Its capacity will admit of anchorage for any number of ships; wood may readily be obtained, as the country abounds in forests, and

the coast is accessible to the smallest boats; nor would any difficulty occur in taking in water from the large pond on the peninsula we have just now mentioned. The appearance of the bay is moreover, picturesque, is two chains of lofty mountains of parallel direction embracing the whole shore, and giving it the appearance of a beautiful valley invaded by the waves.

These different observations afford the following conclusions:

1st. That of the five islands, marked on charts hitherto under the denomination of Schouten, one alone has actual existence.

2d. That the coast which extends from the north cape of this island of Schouten to lat.  $41^{\circ} 6' S.$  constitutes a new peninsula, to which we have given the name of Freycinet Peninsula.

3d. That no other channel or strait exists but that between Schouten Island and Freycinet Peninsula.

4th. That the whole space comprised between the pretended Schouten Island and Diemen's Land forms a large and very handsome bay, denominated Fleurieu Bay, in honour of the illustrious Savant to whom France and its navy are indebted for so many valuable works.

5th. That Diemen's Land, previously aggrandized by us by the addition of the peninsulas Tasman and Byache, is still further enlarged from our last survey by the adjunction of all the Schouten islands, one only excepted.

Finally, these results from these different conclusions, that our survey so minutely comprehends all the geographic detail of this part of Diemen's Land, that it may be looked upon as one of the most complete that could be made on a similar expedition.

These operations being thus terminated we set sail in the afternoon of the 27th Feb. and directed our course round the southern part of the island Maria. But before we leave it entirely, let us exhibit a summary view of its physical constitution; a view which seems to me the more requisite from this constitution being in great measure the same as that of the neighbouring lands, and especially of Schouten Island and Freycinet Peninsula.

Maria Island, discovered in 1642 by Abel Tasman, is situate on the eastern side of Diemen's Land, in lat.  $42^{\circ} 42' S.$  long.  $145^{\circ} 54' E.$  of the meridian of Paris; the observation being calculated for the south point of Oyster Bay. It is of very irregular figure; wide, and more lofty on the north and south; it is very narrow towards the middle, so much so, as in one part to present an isthmus but 250 or 300 paces broad; and here its elevation above the sea scarcely exceeds 10 or 12 meters \*. The geographical position of this island, its exposure to the polar winds from the south, its little extent, the loftiness of its two parts on the N. E. and S. E. the contiguity of the high mountains of Diemen's Land, the plan of the island, so greatly narrowed near the middle that its two extremities embrace little but the sea, and, lastly, marshes of tolerable extent on the north side of the Bay of Oysters; these are collective circumstances tending much to diminish the proportion of heat it experiences. In fact, notwithstanding we were on the island during the hottest season in these countries, the extreme of heat during our stay did not exceed  $15^{\circ}$  of Reaumur † while the mean of heat was  $12, 9^{\circ}$  of Reaumur ‡. The nights especially were very cold, for at about four in the morning the mercury scarcely maintained itself in the thermometer at  $8^{\circ}$  Reaumur §. The causes we have pointed out tending to diminish the degree of warmth felt on this island concur to render the atmosphere on the other hand much more humid. Hence mists are very common, and night and morning the summits of the mountains are constantly enveloped in vapour.

\* 32 to 39 English feet. †  $59^{\circ}$  of Fahr. ‡  $55, 22^{\circ}$  Fahr. §  $46, 4^{\circ}$  Fahr.

The soil participates in the character of the atmosphere ; wherever it is not rocky or sandy it is constantly moist, and the lowest parts are marshy.

Still, fresh water is a rarity in Maria Island ; nor will this appear strange, attention being paid to the nature and constitution of the country. In the Bay of Oysters we found only a very sparing rill of fresh water on the south side, and a few pits dug by the natives on the borders of the marshes of the north side, in which pits the water was stagnant and bad. In Riedle Bay I discovered two small rivulets, one at the foot of the hill of the tomb, the other on the same shore, but nearer to the mouth of the bay. The water of these two rivulets was excellent ; but as the anchorage in the east bay, if not impracticable, is at least very dangerous, their existence is of little value to navigation. The barometer, during our stay, was subject to great variation ; many times the mercury sunk from  $28^{\circ} 4'$  to  $27^{\circ} 10'$  and even  $27^{\circ} 9, 5'$ . The weather altogether much resembled the latter part of autumn in our country.

The mineral productions of the island are not multiplex, the generally granitic nature of the soil acts, in measure, as an exclusion of any other substance. The granite we collected is of two species ; one very dark and small grained, is that of which the rocks on the south and south-east are composed : this appears again on the southern coast of the Bay of Oysters, at the northern part of the same bay, and, in short, seems to be the base of all the less elevated rocks. The second species is remarkable from its large crystals of yellowish feldspar and the greenish hue of the mica, which, combined with quartz, intervenes between the crystals. This magnificent species of granite, discovered again by M. Bailli on the Furneaux islands, was observed by me on Riedle Bay on the top of the hill of the tombs. All the masses of rock in the neighbourhood of the second rivulet of fresh water are of this substance ; and all the frowning peaks of the N. E. appear to be of similar nature.

Of freestone the varieties are chiefly two ; the one primitive, compact, of fine grain and homogeneous texture, whitish, and eliciting sparks ; it forms very large masses, and obstructs the vallies which lay between the granitic rocks, leaning on the sides of them ; of this substance also some breakers appear to be composed. The other freestone, of secondary origin and little consistence, is friable, and very calcareous ; it lies in horizontal beds in a very regular manner, reaching to the summit of the granitic ramparts of the eastern coasts : its origin may be attributed to a long succession of calcareous deposits.

Among the mineral productions of Maria Island, must further be noticed an oxidated iron ore of a beautiful red colour, of an earthy grain, and argillaceous appearance : it is found in various parts of the island, and furnishes the natives with the chief ingredient for reddening their hair.

Vegetable earth, commonly of little depth in the summits and sides of the mountains, lies on the contrary in very thick beds in the vallies ; is of excellent quality, strong, fat, and black, and when violently heated becomes red, announcing the presence in large quantities of the oxide of iron. In the marshy spots on the north side of Oyster Bay, this earth, formed almost exclusively of decayed vegetables, resembles peat.

The sand of the shore of Riedle Bay is darkish, quartzzy, and contains much of the *detritus* of marine plants ; that of the shore of Oyster Bay, mixed with decomposed shells, is whiter, finer, and more calcareous.

In no part are there found any volcanic substances, at least none were seen by us.

Vegetation, generally speaking, flourishes less on Maria Island than on Diemen's Land ; its eastern side is too steep and mountaneous, and too much exposed to the winds to be very fertile, and that on the west is either too sandy or too marshy to be productive. Still the island from this side has rather a pleasing appearance, seems well covered with wood,

wood, and yields excellent herbage. With respect to its peculiar plants I must notice in particular a new species of typha, of the branches of which the natives make their pirogues, and hence have a great advantage over the savages of the channel of Dentrecasteaux.

As to mammiferous terrestrial animals, the only one I saw was a species of dasyure, scarcely so large as a mouse: I obtained one of these animals alive, in exchange for some trifles, from a savage, who was about to kill and eat it.

Mammiferous sea animals were numerous on these shores; and here we saw large shoals of dolphins, and cetaceous fish, with incalculable legions of seals. These last animals alone are sufficient to give considerable importance to Maria Island: to this subject we shall have occasion at a future period again to advert.

For birds, they mostly belonged to the different species we have before noticed in the channel of Dentrecasteaux, a particular kind of parroquet and a beautiful bulfinch excepted, which was the first of its species we saw.

In the class of reptiles, we obtained several species of lizards, one of which belongs to a new genus, differing from, but somewhat resembling the scincus.

Of fish, I obtained various new species; likewise of insects and crustaceous animals. To this last class of my acquisitions belongs a large species of maia, of which we every day caught such numbers as to be enabled to make a general distribution of them to the ships' companies. Among our testaceous collection was a magnificent voluta undulosa, many of the turbo genus, a rose-coloured helmet (casque) of singular beauty, an elegant tellina, a variety of phasianellæ, which formed banks of great extent at different points of Oyfter Bay, and a valuable shell-fish, which seemed to me to constitute a new genus, next to that of the trochus, and of which a species bearing some resemblance is found in a fossil state at Grignon, in the neighbourhood of Paris. Of soft zoophytes, I acquired three new kinds of sponge, an elegant medusa, several ascidies, and a beautiful actinia. But I again repeat it, the enumeration merely of these different objects, however succinctly given, would occasion me much to exceed the bounds of a work of this nature.

#### CHAP. XIV.—*Eastern Coast of Diemen's Land: — Banks's Straits: — Bass's Straits.*

[From the 15th of February to the 29th of March, 1802.]

IN the preceding chapter is seen that the islets Taillefer project in front of Schouten Island; they are seven in number, five of which are very considerable rocks, more or less elevated above the water. Incessantly beaten by a stormy sea, these islets are barren, much rent, of fanciful shape, and of a dull and reddish colour; one alone, the most extensive of the groupe, exhibits the top of some languishing and stunted trees. These islets seem of granitic substance, like the Island Schouten, from which they are separated only by a narrow channel, presumptively of great depth.

The Island Schouten itself is, in every respect, one of the most remarkable spots in these regions; it is wholly composed of lofty black mountains, and deep intervening vallies; the slope of the mountains to the vallies is rapid, and, as it were, slippery; less steep next the sea, they are yet even in this part inaccessible. The eastern side of these frowning mountains is absolutely naked, and destitute of verdure; their crest is distinguished in many parts by granitic needles, which might readily be mistaken for so many columns raised by the hand of man. Towards the northern part of the island,



island, one of these rocks bends over in such manner as to resemble an immense hook. This frightful coast is washed by a very deep sea.

Between Schouten Island and Freycinet Peninsula lies the strait of the Geographe, described in the preceding chapter.

Diemen's Land terminates in this part with a large cape, from two to three hundred feet high, named by us Cape Degerando, in honour of the respectable Savant of that name.

Beyond this cape the land rises still higher; two groupes of mountains spring from the bosom of the waves, united at their base by a low and sandy isthmus, visible only when close to it, and which makes the two groupes appear like distinct islands. These high mountains are of primitive formation; they are of huge dimensions, of an umber colour, rapid of declivity, naked, and rent in many parts; from their surface, at intervals, solitary needles tower aloft: on their second rise the sides of them are frequently steep as ramparts.

Thouin Bay, narrow, but of little depth, and entirely open to the east, spreads between these two masses of mountains, which advance on either side of it as if to form two great capes at its entrance: that of the south being the most salient, and remarkable on account of its height and bold figure, we named Cape Forestier; it lies in latitude  $42^{\circ} 11' 23''$ .

From Cape Forestier to the cape which we denominated Lodi, the coast presents many small sandy inlets. Within the last space, the land is much less elevated than in the south; but shortly after it rises again towards the Point St. Patrick of Furneaux: it appears to be well wooded about this point; and between the mountains pleasing vallies are distinguished. On our passing all this part of the coast, it was covered with fires and columns of smoke.

From Point St. Patrick to St. Helena Point, the land continues rising to a still greater height, leaning against several levels, the last of which stretches far into the country. Some insular peaks rise at intervals from this long chain of mountains; one of these, denominated Arcoli Peak, terminates in a very sharp point, and is of a pyramidal form, with three sides. The most remarkable of these peaks is more than 1000 meters high\*; it resembles an immense cone, and is at a distance of five or six leagues in land: we called it Piton Champagne; its direction is south-west of Point St. Helena.

At a short distance south of this same point, in latitude  $41^{\circ} 25' 30''$  south, is a small island, the more interesting from the circumstance of its having furnished fresh water, at a time when all the sources of the main were dried up, to those unfortunate companions of our voyage whom we were obliged, as will be seen, to abandon on these dismal shores: we called it Maurouard Island, in honour of the midshipman who commanded the long-boat on the occasion to which I advert.

The Bay of Fires of Furneaux occupies the interval comprehended between St. Helena and Eddystone Points; it is capacious, of very little depth, and open to all winds from the east. The coast of this long bay is formed of high primitive mountains, covered to their summit with pleasing verdure; Eddystone Cape itself is very lofty and steep.

From this last point to Cape Portland the coast rapidly declines: in many places even it consists of uniform sandy downs: still, in the interior, mountains are distin-

\*. 3278 English feet.

guished; but proportionately as we approach the north, their distance is greater from shore.

Somewhat beyond the Eddystone Point is a narrow but deep inlet, full of breakers.

Farther on are two groupes of rocks, extending the space of a mile, and of singular appearance: at first sight they might be mistaken for the ruins of two large villages; and so perfect is the illusion, that even village spires are mimicked by the lofty needles of granite which rise above the other rocks.

From Cape Degerando to Eddystone Point, the eastern coast of Diemen's Land follows the general direction of from N. to S.; but, beyond it, from N. N. W. to S. S. E., as far as off Cape Portland, which is the north-eastern extremity. The coast in this part is very low, and navigation dangerous, on account of the great number of rocks, many of which are level with the water.

Cape Portland itself is extremely low, scarcely even above the waves, as we shall have occasion elsewhere to notice; it forms the south point of Banks's Strait. But here let us rest a moment, that we may first terminate what relates to the investigation of the eastern coast of Diemen's Land.

Furieux discovered and visited it first in 1773; but, owing to bad weather, was unable to give a due attention to the survey of it: in his narrative indeed there is no detail either on the topography or navigation of this coast; he has even neglected to notice the observations which served as the basis for the draught of his chart.

Captain Flinders, in 1779, ran along this coast at little distance from shore, but made no alteration in the chart of Furieux, nor himself afforded any particulars, either nautical or topographical, respecting this part of Diemen's Land.

On these two points, our labours leave nothing to be desired; for the unfortunate circumstances I have to relate occasioned us to run along this coast repeatedly, and so near it, that any thing worthy of remark could scarcely have escaped our observation.

The reader will doubtless call to mind, that on the 27th February in the morning, we sailed from Oyster Bay with intention, after doubling Maria Island on the south, of proceeding to the examination of the eastern coast. Fortunate hitherto in all our operations at Diemen's Land, we were in hopes success would continue to attend us: but, sad reverse! scarcely had we rounded Cape Peron ere we experienced contrary winds; strong currents bore us to the south; and often as a favouring breeze sprung up for an instant, as successively did it die away into the most perfect calm. These adverse incidents delayed us so much that we did not reach the coast of Schouten Island before the 6th March in the morning.

The whole of this week we were constantly surrounded by a moist and foggy atmosphere, the mist being so thick that the two vessels could scarcely be distinguished by those on board; we were consequently obliged to make signal by firing of guns to admonish the Naturalists what tacks to make. Our decks were all of them drenched with water during the whole of the day, while at night the vapour more condensed, resolved into a haze of such permeability that nothing could withstand its penetration. The temperature was from  $10^{\circ}$  to  $14^{\circ}$ , notwithstanding the season was still the summer of this country. The condition of our sick on board, already bad, by this state of the atmosphere was rendered far more deplorable.

In the morning of the 6th March, we coasted along the illets Taillefer and Schouten, but at a considerable distance from them. About noon we found ourselves off Cape

Forestier, when our geographic engineer, M. Boullanger, left us in the barge commanded by M. Maurouard, to survey the coast nearer in shore. The vessel was to take a direction parallel to that of the boat, and never lost sight of her; but scarcely had M. Boullanger been gone a quarter of an hour, before our commander, without any visible reason, tacked for sea, and shortly after our boat was out of sight. We did not stand in for the land again till towards night. A violent gale arose which freshened every instant; we were irresolute which way to steer, and darkness enveloped us, and prevented our distinguishing the coasts off which we had abandoned our unfortunate companions.

The two following days were employed in search of them; but neither the boat nor its crew were to be found: and, to complete our misfortunes, the *Naturaliste*, by violent squalls, was separated from us in the night between the 7th and 8th. On the 8th we dispatched our long-boat, but it returned after a fruitless cruise; and the swell of the sea was so great that we with difficulty got her crew on board; in shipping the boat itself two of her planks were stove in against the side of our vessel.

In such a critical posture, our commander called a council of the staff-major on one hand, and on the other, of the masters and mates, to deliberate on what should be done. 'Seek our companions,' was the unanimous cry. This search however it became far more difficult to put in execution than before, as the absence of the *Naturaliste*, our destitution of a barge, and the injury sustained by the long-boat, left us only the ship itself with which this could be effected; and, assuredly, the enterprize of coasting with a large vessel, and following all the sinuosities of a wild and unknown coast, was not only difficult, but a service exceedingly replete with danger. Our chief was sick, and took to his room, after having delegated the command to his first lieutenant M. H. Freycinet, with orders to pursue the search recommended by the staff and crew. To this object the whole of the 9th was dedicated; for eight hours M. Freycinet directed our course along these frightful shores, with an intrepidity, coolness, and precision, worthy of the greatest praise: not a single manœuvre failed.

Still was our last as fruitless as had been our former search; and as no hope now remained of meeting again with our friends but in the north, we steered for Bass's Strait.

During our stay off this coast, we had time to be convinced that the sea here is rarely smooth: in fact, the least wind is sufficient to produce a swell so great as to render it almost impassable to small craft. Scarcely did the wind begin to set in shore, before the horizon was whitened by the surge; and in a few seconds after, the waves ran so high, were so short, and so quickly succeeded each other, that our vessel was greatly strained by the effect of them: notwithstanding this, the season was the finest of the year in these climates.

While steering for the strait, we discovered on the 10th March a small vessel making towards us: we joined her, and her captain coming on board, informed us that she was twenty days out from Port Jackson, on a voyage to catch seals at Maria Island; that the English colony of New Holland was already in a highly flourishing condition; that it possessed all the requisite means to satisfy not only the wants but the luxuries of life; that we were daily expected there; and that orders had been dispatched by the English government that we should be received with the attention due to the nature of our mission, and the rank of the nation to which we belonged. We in turn made him acquainted with the loss of our barge; and intreated, in case of meeting with our unfortunate companions, that he would afford them all the assistance in his power, which he promised. We moreover pointed out to him the *Islet of Seals*,

Seals, in Fleurieu Bay, as one of the most favourable spots for the fishery he was pursuing: after which we parted company to follow our course towards the north.

The same obstacles I have noticed on our passage from Maria Island to the eastern coast, again occurred to prevent our progress to the strait; and we did not gain sight of the Furneaux Islands, which with the N. E. point of Diemen's Land forms one of the passages into Bass's Strait, till the 17th in the morning: but before I enter upon this great strait, a few remarks may be necessary.

In geographical discoveries, as in those of all other sciences, the same accidents occur. After having defied the effects of genius, and all the researches and pertinacity of the laborious student, these discoveries present themselves, unsought as it were, to individuals the least accustomed to researches or labours of the kind. Thus the famous discovery of the strait which divides New Holland from Diemen's Land, looked for in vain by the most experienced navigators, was reserved for the surgeon of an English ship. And, which is no less astonishing, it was not before the year 1798, that is to say, ten years after the establishment of the colony of Port Jackson, that it took place, notwithstanding its proximity to this establishment.

This strait is about fifty leagues in breadth from north to south, by nearly an equal length from east to west: its eastern mouth is rendered considerably less by the Two Sisters, the Furneaux Islands, the number and dimensions of which are not yet perfectly known, Clark Island, the Island of Preservation, Swan Island, and its dependent islet. Between Diemen's Land, Swan Island, and its islet on the one side; and on the other, the residue of the islands noticed, is a channel ten miles in breadth: to this passage in the strait is it that Mr. Flinders, by whom it was first discovered, thought fit to give the title of Banks's Strait. Between the Furneaux Islands on the north, and Wilson Promontory, which forms the southern point of New Holland, and projects more than twenty miles into the strait, are Kent's Groupe, the very numerous rocks of the promontory, the pyramid, and several other dangerous rocks, which obstruct the large northern pass of the eastern mouth of the strait. On the west, Hunter's Islands present themselves, flanked by a great number of rocks, banks, and formidable reefs. More towards the north, and precisely in the middle of the western opening of the strait, are the great island King, New Year's islet, the Rock of Elephants, and many reefs, connected with the distinct system of this groupe. I shall have occasion in the course of this work to describe, in succession, these several lands: at present it suffices I should observe that, separate from all distinct physical circumstances, the navigation of Bass's Strait, must necessarily be difficult and perilous; and when to the difficulties and dangers before portrayed is added, that violent currents exist in this strait, and that it is subject to dreadful gales from the S. W. the reader will have little room for wonder at the close succession of imminent dangers to which our vessels were exposed on each occasion of our entering this passage; and will be better able to account for the cause and frequency of those shipwrecks here, to which we shall have elsewhere to advert.

I have before noticed, that on the 17th of March we made the Furneaux Islands: these are very lofty mountains, which, in favouring weather, are readily distinguished 12 or 15 leagues out at sea; they in every respect assimilate with the horrid picture given of Schouten Island. In one of the following chapters more particular observations respecting their history will be presented.

Scarcely were we in Banks's Strait ere the sky was obscured by dark and heavy clouds: we yet pursued our course. In the night torrents of rain and squalls of wind succeeded each other almost unintermittedly.

On the 18th we coasted along the shore between Portland Cape and Waterhouse Island. This portion of Diemen's Land, as before observed, is extremely low, and in many points scarcely above the surface of the water; but inland is a high chain of mountains running in a direction N. N. W. to S. S. E., a circumstance which will explain the prodigious difference that exists between the S. E. point of Diemen's Land and that of the N. E.

Hitherto we indulged the hope of finding our boat, or joining again our consort: but after two days vainly spent in search of them, we began to despair of a meeting during the voyage; and but too just were our fears.

In course of the 20th, we distinguished a vast number of dolphins, and many whales from 13 to 16 meters in length\*. I neglected to remark also at the time that off Cape Lodi we saw a prodigious troop of these cetaceous animals.

From the 21st to the 26th of March we experienced one of the most furious gales we had hitherto met with in those seas: many of our sails were torn to rags by the gusts, and on the night of the 21st we were on the point of being driven on the Furneaux Islands. To avoid this perilous catastrophe we were obliged, notwithstanding the hurricane, to hoist every rag of canvas; and in the morning of the 22d we succeeded in getting clear of the strait, by the passage between Kent's Groupe and the promontory. At nine in the morning we doubled the pyramid, an enormous rock resembling at distance a gothic ruin: steering next westward of Kent's Groupe; we succeeded in doubling these, but with much difficulty, and luffing close under them. Majestic and terrible was the aspect of these rocks of granite, naked, rugged, and beaten as they were by roaring waves, which seemed every instant on the point of overwhelming them with torrents of foam. The chart of M. Flinders, though generally exact, with respect to this groupe is incomplete; he makes the number of islets barely twelve, whereas we ourselves counted sixteen.

The tempest still continued on the 24th, and on this last day we saw an amazing number of whales. I have already several times spoken of the abundance of these animals off the coast of New Holland: on this subject I shall elsewhere be more minute.

The 27th in the morning, the hurricane having ceased, we were eager to enter the strait, being anxious to proceed to the S. W. coast of New Holland, an essential part of our mission. In the morning we coasted along the portion of land which extends from Ram-Head to Wilson's Promontory: it is not here so low as marked in the chart of M. Flinders.

In the vicinage of Kent's Groupe we distinguished other islets not laid down in this chart: one of these, in shape and colour resembling a brioche† of enormous size, was distinguished by that denomination.

On the 28th at noon, we were in sight of the islets in advance of Wilson's Promontory; and successively observed about twenty of them, varying in dimensions, but all steep, barren, and rent by the waves. The English chart does not specify near so many, and in this instance is defective; it is still more so in what relates to the site of the promontory, which is laid down in latitude  $38^{\circ} 17'$  S. longitude  $144^{\circ} 41'$  E. of Paris, while, by our observations, the most southern part of this promontory is in latitude  $39^{\circ} 10' 30''$  S. longitude  $144^{\circ} 20'$  E. An error of this magnitude must be attributed exclusively to want of exactness in the means used by M. Flinders for the

\* 42 to 52 English feet.

† A French cake made of fine wheaten flour, eggs, cheese, and salt, in form of a bun.

ascertainment of the position of this important point. This celebrated navigator, in fact, notices that M. Bafs was unable, in his course round the promontory, to take any very precise observation, and could only determine the position of it by reckoning, a means, as M. Flinders again remarks, which is unworthy of much credit, in seas where the currents run so strong as in the strait in question. I must further observe, before I terminate this article, that the islets of Kent's Groupe appeared to us likewise to be placed too far towards the east; but here I merely point out these valuable results of our observations; they will be presented by M. Freycinet, with all the minutiae their importance merits. Let us now return to our subject.

The land at the promontory is very lofty, and presents two or three tiers of mountains rising one above the other towards the interior. Along the whole of this coast there is abundance of water, and the only danger to be apprehended to navigation arises from the currents, the islets, and the rocks I have mentioned.

Wilson's Promontory forms, westward, a very large cape; to which Bafs gave no particular name, and which is scarcely noticed in M. Flinders's chart. A-head of this cape are six large islets, one of which is nearly a mile and a half in length.

Directly northward, a very large and deep bay opens, called by us Paterson Bay, in memory of the respectable and learned English traveller of that name, one of the most intimate friends of M. Bafs. Many very lofty peaks were distinguished on the eastern coast of this bay, and in the distance a chain of high mountains.

The 29th of March, at day-break, we began to coast along a second bay, which, like the preceding, lies N. W. of the promontory; it was called Venus Bay, from a vessel commanded by M. Bafs, of which mention will elsewhere be made.

The land on this second bay is tolerably lofty towards the two points; but the residue of the coast by which it is surrounded is much lower. In the interior was seen stretching the chain of mountains of which the promontory seems to be the extreme point.

The same day in the afternoon, we were abreast of the island which lies before the beautiful western port discovered by M. Bafs; but of which the detailed geography, as will shortly be seen, was completed by our consort.

Here terminate the labours of the English navigators; and here begins our long survey of Napoleon's Land.

#### CHAP. XV. — *Napoleon Land.*

[From the 29th of March to the 8th of May 1802.]

UNDER the name of the south and south-west coast of New Holland, the whole portion of this continent is designated, comprized between the 33d and 39th degree of latitude south, and within the parallels of 112° and 144° E. of Paris, forming an immense scarf from eight to nine hundred leagues in length, the two extremities of which terminate, the one at Cape Leuwin in the west, the other at Wilson's Promontory in the south.

Of this immense space, that part only was known in Europe, at our departure, which extends from Cape Leuwin to the islands of St. Peter and St. Francis. Discovered by the Dutch in 1627, this part had, in modern times, been visited by Vancouver and Dentrecasteaux; but the last navigator not having been able to advance beyond the islands of St. Peter and St. Francis, which form the eastern boundary of Nuyt's Land, and the English having extended their exploration no farther towards the south than Western Port, it follows that the portion comprized between this last point and Nuyt's Land

Land was unknown at the moment of our arrival in these parts; and as our investigation had for object no less than to resolve the problems whether or no New Holland consists of one sole continental island, and whether any great river exists on this vast expanse of land, each of us felt augmented courage and zeal in the prosecution of the momentous enquiry.

On the 30th of March, at day-break, we steered for and soon made the land; a large cape, which we denominated Cape Richelieu\*, projects and forms the entrance of a deep bay, termed by us Talleyrand Bay. On the eastern coast of this bay, and near its extremity, is a port, the windings of which were tolerably well distinguished from the mast-head: we called it, at the time, Outset Port†, but hearing afterwards that it had been more minutely surveyed by the English brig Lady Nelson, and had been named Port Philipps, we with greater pleasure continue this last name, from its recalling that of the founder of a colony, in which we met with succour so effective, and so liberally granted.

By three o'clock we were abreast of a large cape in latitude  $38^{\circ} 42'$  S., longitude  $141^{\circ} 49'$  E. of Paris, called by us Cape Suffrein. The land at this point is rather high, but runs still higher on nearing Cape Marengo‡, where our survey terminated.

On the 31st, at dawn, we again stood in for land. The sky was clear and serene, the sea smooth, and the wind in a favourable point: under such fortunate auspices we were enabled to keep pretty close in shore, and insured to our different geographic observations a great degree of precision. The whole coast from Cape Marengo westward to Cape D'Estaix, a space of about twelve miles, is very lofty, and Cape D'Estaix itself is well covered with wood: but here the aspect of New Holland undergoes a sudden change; the steep beach, thence almost constantly perpendicular, of a greyish or yellowish colour, and wholly destitute of verdure or vegetation, forms a multitude of small capes, and coves running but little inland, and resembles at distance a long series of regular fortifications, or more, possibly, that gigantic wall which separates China from Tartary. Cape Volney, off which we were at noon, is remarkable from a chain of rocks which run far out to sea. Beyond this we discovered a portion of land apparently detached from the main, which we called Latreille Island, from the naturalist, equally learned and modest, of that name. Continuing our course, we found ourselves opposite to a conic-shaped peak, which received the denomination of Beacon Peak (Piton de Reconnoissance), as did the most neighbouring cape, that of Cape of Mount Labor.

At this period the barometer indicated  $28^{\circ} 7'$  to  $28^{\circ} 8'$ , the greatest elevation of the mercury we had ever noticed before; and the atmosphere was perfectly serene. The thermometer in course of the day varied between  $13^{\circ} 5'$  and  $15^{\circ} 11'$ ; at night it sunk to  $10^{\circ}$ .¶

When abreast of Cape D'Estaix, in Daubenton Bay, and but little distance west of Cape Folard, we distinguished columns of smoke, almost an assured sign of these dismal shores being inhabited by man: many species of gulls of the genera *gavia* and *lari*, boobies, and divers, were seen; but, if some flying fish be excepted, all sea animals seemed to have abandoned these shores,—shores which offered them no shelter, and against which the ruffled sea perpetually rolls its waves. Our collection was therefore limited to some new and singular fuci. One of these which I have described under the name *fucus phyllophorus*, was remarkable above the rest, from the disposition of its leaves: from each side of a large, flat, and sinuous branch, at regular intervals shoot out

\* Seen by Lieutenant Grant in 1800, and called by him Cape Schank.

† Port du Debut.

§  $55, 4^{\circ}$  Fahr.

‡ Called by Lieutenant Grant Cape Albany Otway.

||  $59^{\circ}$  Fahr.

¶  $50^{\circ}$  Fahr.



single and lanceolated leaves; from the edges of these leaves spring others of similar form, each borne on a distant stalk; in some instances even a third succession of leaves grow from the edges of the secondary ones, nor does it appear to me possible to assign any precise limits to this mode of reduplication, a mode so much the more singular from the real organs of generation of the planet, the globuli common to the majority of fuci, being very numerous in this species, and growing on a long stalk at the base of the mother leaves.

At eight in the morning of the 1st of April, we discovered a small island, which we denominated Fourcroy Island\*, almost of quadrangular form, with its edges slightly scalloped, it is low, and uniformly flat, of a dull and greyish colour, barren as the continental shore adjacent, and the beach of it, like that shore, perpendicular. Its position is in latitude  $38^{\circ} 26' 15''$  south, longitude  $139^{\circ} 52'$  east of Paris. Opposite to it, on the main, a remarkable cape was called Cape Reumur. About noon we entered a very large bay, named by us Tourville Bay.† Shortly after we discovered a second island, of a dark colour, its shores steep, as those of the preceding; its surface, like that, low and unproductive: we called it Dragon Island‡ on account of its singular shape: this island, in fact, towards one of its points, resembles the half-opened mouth of an enormous serpent. The waves around, and the islets connected with it, were at this time covered with innumerable legions of sea-fowl, as yet too young to wing their flight: for the space of three quarters of a league these birds seemed, as it were, heaped one on the other; their prodigious number, their confused and deafening screams, the tender anxiety of the parent fowls, which flew by myriads over their heads, screaming, like them, with flight, the whimsical figure of the islets, which serve as the asylums for these watery tribes, altogether presented a picture extremely singular and interesting.

Montaigne Cape § terminates on the west of the Great Bay of Tourville: beyond this Cape Duquesne presented its barren, low, and yellow shores; but already the fall of day began to render our observations dubious, and on reaching this cape they were suspended.

The coast recently surveyed by us presented the same appearance with that observed the day before, and was equally low and barren, that portion alone excepted between Dragon Island||, and Cape Duquesne, on which, at intervals, a few small trees upreared their sickly heads. Columns of smoke were distinguished again in Tourville Bay¶. The barometer during the day stood at  $28^{\circ} 6' 7''$ , and the mean heat of the thermometer was  $15^{\circ} **$ , a mean which corresponds with that of the spring in France.

(April 2d.) Beyond Cape Duquesne the Great Bay Descartes presents itself, terminated towards the west by a second cape, which, from the immortal author of the Spirit of Laws, received the name of Cape Montesquieu††. It was nine o'clock by then we reached Descartes Bay, and already we were entering it, when our progress was interrupted by a calm. It is of consequence I should here notice, that during the whole time we were off this coast, the same phenomenon constantly occurred every day at the same hour. 'A strong breeze from the N. N. E. and varying to the N. E., which sprung up at day-break, insensibly slackened from eight to nine o'clock, and from nine to ten, and was succeeded by the most perfect calm towards eleven o'clock or noon. Shortly after the wind veered from the east to the south-east, blowing strong, and admitted our giving the greatest latitude to our labours. It is not improbable that

\* The Lady Julians Island of Grant.

† The Portland Bay of Grant.

‡ Grant named it Laurence Island.

§ Grant's Cape Sollicitor.

|| Laurence Island.

¶ Portland Bay.

\*\* 59 of Fahr.

†† Cape Bridgwater of Lieut. Grant.

to these breezes from the east and east-by-south, is owing the failure of every former attempt to survey this coast on the part of vessels steering from the north-west to the south-east.

Scarcely had the calm ceased before we continued our course. The sea breaks with violence against the whitish and sandy downs which form the coast. Beyond these downs, about three or four leagues in land, three single mountains are distinguished: the largest of these was called Mount St. Bernard, and much resembles the Table Mountain. A neighbouring cape received the denomination of Cape Mount St. Bernard.

While thus pursuing our discoveries, in perfect security as we imagined, we suddenly discovered a long chain of breakers that had previously escaped our notice, dazzled as we were by the rays of the sun reflected from their surface. We were so close upon them that we cleared them with difficulty by standing to eastward on a larboard tack, and nearly touched their extremity. During this manœuvre, we refrained from sounding for fear of spreading consternation among the crew. Truly frightful indeed was the spectacle presented by these reefs, which extended in a line several miles in length in front of a low, barren, and yellowish shore; and the rugged ridges of which, resembling the teeth of a saw, were scarcely visible in midst of foam and eddies. About the western point of these breakers, which we termed the Carpluters, are two small and whitish islets. Cape Boufflers, in sight of which we finished our interesting labours of the 2d of April, lies some miles north-west of them. Divers species of gulls and sea-swallows (*Sterna*) were the only animals of the feathered tribe we perceived; the sea presented us with many medusæ, and a large seal which was floating asleep on its surface. Towards the extremity of Deschartes Bay columns of smoke rose, beyond the Downs; but, in general, the barren and wild nature of all this coast is such as must act as a repulse to all inhabitants of the human species: at least it may fairly be inferred that it is capable of furnishing subsistence only to a very limited number.

(3, 4, 5, 6 April.) From Cape Béliador to Cape Boufflers the coast presents a succession of small and very pleasing inlets; afterwards it bends inwards and forms Estaing Bay, terminated N. W. by a great cape, which, from the Pliny of France, we called Cape Buffon. From this last point to Rivoli Bay, a space of 40 miles, the continent presents no remarkable concavity nor any shelter whatever for the smallest vessel. Every where exposed to the impetuous winds from the S. W. incessantly beaten by the waves of the immense Austral Ocean, this part of New Holland is far more frightful than those we have hitherto described. The waves in the whole of this shore occasion a terrible surf, the hollow and threatening sound of which is heard even in the calmest weather; and on several occasions, where we steered in nearer towards the shore than usual, we saw it covered with the foam of broken billows. In every part the most perfect barrenness reigns, nor any where do traces appear even of the slenderest rill. How dreadful the fate of those navigators who should be cast on these shores!

This fate, however, we were near experiencing ourselves in course of the 6th April. At three in the afternoon, at the instant we were most deeply occupied on our geographical labours, we were on the point of running on a ledge of rocks, so nearly level with the surface that we did not distinguish them till almost under our bow.

In the course of this last part of our researches, that is to say, between the 3d and 7th April, we observed several seals on the surface of the water, a new species of *Beroë* †, one of *Salpa* ‡; and, on the evening of the 4th April, the sea appeared as if covered with a charming species of portune, singularly remarkable on account of the rose colour of

\* Called by Grant, Cape Northumberland. † *Beroë dactyloides*, N. ‡ *S. Octaedra*, N.

its shell, and the beautiful blue of its two eyes. I have described it under the name *P. cyanophthalmus* N. The temperature of the sea at its surface was then  $14^{\circ}$  \*. Independent of these animals, in the morning of the 5th April, we saw a numerous shoal of dolphins, and the same day fell in with a column of the scomber genus as large as our tunnies §, the species of which I was unable to ascertain. The sea during the whole of the night was extremely phosphorescent: the sky sombre and cloudy, and the barometer had sunk to  $28^{\circ} 3'$ . These atmospherical variations seemed to correspond with those of the wind, which then blew from the N. W. and consequently came freighted with vapour from the Indian ocean. It was at the extremity of the Bay of Rivoli alone that we distinguished any smoke.

(7th April.) This last mentioned bay presents itself in form of a large oval, 8 to 10 miles deep, and terminated on the south by Cape Lannes, northward by Cape Jaffa. Towards this last point the entrance into the bay is contracted by a chain of reefs. Fifty miles beyond Cape Jaffa another bay occurs, from 6 to 7 leagues broad at its mouth, and which penetrates to a somewhat greater extent inland; we named this Lacepede Bay. Cape Bernouilli, its most eastern point, has very dangerous reefs a-head of it; on our approach to which the line gave but six fathoms water with a rocky bottom; and in doubling these we experienced great difficulty. In speaking of the constitution of this new part of the coast, the dismal picture we have before presented of the sterility and monotony hitherto exhibited by New Holland, must receive a still darker shade. Yet if judgment can be formed from the great number of fires we distinguished at the bottom of Lacepede Bay, the human species should be tolerably numerous on this coast. Myriads of cormorants on the islets contiguous to Cape Bernouilli appeared to us the exclusive tenants of those terrific rocks.

The 8th April, at noon, we were by reckoning in latitude  $36^{\circ} 1' 10''$  south, longitude  $137^{\circ} 7' 40''$  east of Paris. Already had we surveyed a length of coast, measuring the different windings it presented from Wilson's Promontory to the point where we were, 944 miles in length, when, at but little distance from Cape Villars, we perceived at the extremity of the horizon, a shoal of dolphins of such vast extent, that we at first mistook them for an immense chain of reefs; their rapid course however soon undeceived us; and we made preparations for the destruction of some of their number—destruction which the poor animals seemed by their manner to second. Numerous detachments, like so many videttes, preceded the main body, approached very near to us, and rounded our ship in every direction; the rapidity of their evolutions, and the boldness of their leaps, interested us the more from our never having seen till now so vast a shoal of cetaceous animals. We were filled with wonder how in seas apparently so destitute of fish, these myriads of dolphins should find sufficient sustenance; how, so close as they seemed to be to each other, so numerous as they were, they were capable of executing the most complicated manœuvres, and these in the most rapid manner, without falling foul one of the other. In a few seconds nine of them were killed, weighing each from 80 to 100 myriagrammes †; and this good fortune seemed to us a special boon from Heaven. For, at this time, the scurvy had begun its dreadful ravages, and the tainted and worm-eaten salt provisions to which we had been for several months reduced, were at this time, every day encreasing the prevalence of this malady.

We had now scarcely ended our fishing, when signal was made from the mast-head of a sail discerned in the horizon. Every one at first concluded it was the Naturaliste,

\*  $57, 2^{\circ}$  Fahr. § *Scomber thynnus*. Lacepede. † 1764 to 2205 lbs. English avoirdupois.

and joy was universal ; but in a little time we were sufficiently near to distinguish that this vessel was not our consort. As she steered under full sail in a contrary tack to us we were soon abreast of each other : she then hoisted the English flag, we shewed French colours, and imitating her example, laid to. The Captain now hailed us, and enquired whether we were not one of the French ships that left France on a voyage of discovery to the Austral hemisphere. Being satisfied on this head, he lowered his boat, and a few instants after we received him on board. We learnt he was Captain Flinders, the same who had already circumnavigated Diemen's Land, in the Investigation, the name of the ship we saw ; that he had sailed from Europe eight months before with intention of completing the survey of New Holland, and the archipelagos of the great equatorial ocean ; that he had been about three months at Nuyts Land, but owing to contrary winds had been unable to penetrate, as he intended, behind the islands of St. Peter and St. Francis ; that, on his departure from England, he had a second vessel under his command, from which he had been separated by a violent tempest ; and that a few days before, and in the same equinoctial gale in which we ran such perilous risks in Bass's Strait, he had lost his long boat, with his first lieutenant, and eight picked men of his crew. This singular conformity of misfortunes experienced by the two ships serves more fully to evince the extent of danger to which vessels on similar expeditions are exposed.

In relating these particulars Mr. Flinders was very reserved as to his individual operations. We were however informed by some of his men, that he had suffered greatly from the same south winds which had to us been so favourable, and in this we were taught more fully to appreciate the wisdom of our own instructions. After more than an hour's conversation Captain Flinders returned on board, promising to return on the morrow with a distinct chart of Dalrymple river, which he had caused to be published in England. On the 9th, he accordingly returned with it, and shortly after we left him to continue our geographical labors.

Behold us now arrived at a point of Napoleon Land, at which its constitution, hitherto so simple, becomes complicated in such a degree as to render impossible I should pursue the description of it in detail however interesting. By their prominent features alone must the new objects be portrayed which I shall have occasion to describe.

Beyond a bay, the mouth of which is about 10 miles over, and which received the name of Mollien Bay, the peninsula Fleurieu is first discovered from 15 to 16 leagues in length, formed of very lofty lands, presenting many tiers of mountains, from all appearance, of granitic nature.

West of this peninsula a gulf is seen extending 100 miles into the interior, and which, in honour of our august empress, we named Josephine Gulf. Before and nearly fronting this gulf is Decrès Island, \* 210 miles in circuit, separated by Colbert Strait from the peninsula Fleurieu on the east ; and by Lacipede Strait on the west, from a second peninsula, 120 miles in length, called by us Cambaceres Peninsula : the archipelago

\* Before discovered by Capt. Flinders, and called by him Kangaroo Island. The whole coast, in fact, from Cape Leuin to where the ships met off Cape Villers, had previously been explored by Capt. Flinders, who, after infamous treatment on the part of the French Government at the Isle of France, where, on his return to Europe, in a small vessel of 30 tons, he had sought refuge and assistance, is at length restored to his country, and about to publish the account of his voyage. From what is here observed it will be evident to the reader that the French can have no claim in right of prior discovery to the country they have denominated Napoleon Land. Indeed, separate from the whole having been before explored by Capt. Flinders, owing probably to their being without a long-boat, and to the great weakness of the crew from the inveteracy of the scurvy on board the *Geographe*, they do not appear by the narrative to have even once landed, either on the continent, or the islands, that of Kangaroo, their Decrès alone excepted. TR.

Vauban, composed of eight small islands, is at little distance from its western point. Beyond Cape Berthier, which terminates the Peninsula Cambaceres on the west, New Holland again opens to the sea to form Bonaparte Gulf, which penetrates 200 miles into the continent, and has more than 600 miles of coast. This vast gulf has the appearance of the mouth of a very considerable river, and is terminated, after narrowing by almost insensible degrees towards the extremity, by banks of sand. On the western side of the gulf and near its entrance is Champagne Port one of the finest and most secure in New Holland: in every part of it is an excellent bottom; the depth of water, even close in with the land, is from ten to twelve fathoms; and such is the capacity of this magnificent port it is competent to receive the most numerous fleets. In front of the port is Lagrange Island, four or five leagues in circumference, and which, placed exactly in the middle of the mouth of the port, leaves on each side a passage from two to three miles broad, in both which passages a vessel can work with ease and security. Finally, as if nature were inclined in favour of Champagne Port to change the character of monotony and barrenness stamped on the neighbouring lands, she has formed its shores of gently rising slopes, and clothed them with umbrageous forests. We did not indeed find any fresh water at this spot; but the vigour and liveliness of vegetation, and the height of the country, to us, were certain indices of the existence of some rivulets or at least of some copious springs. On this, the most favoured spot of Napoleon Land, there are certainly numerous tribes of inhabitants, for the whole coast seemed in flames. So many exclusive advantages insure special importance to port Champagne, and I may fearlessly affirm that, of all the points of this land, this is the best adapted for the establishment of an European colony.

In front of this port is the archipelago of Leoben, composed of eight small islands, the most considerable of which is very narrow and long. A second archipelago, occupying the middle of the mouth of the gulf, received the name of Berthier Archipelago. The chief island of this large groupe resembles in figure a large hook. Besides these islands there are more than twenty others, sprinkled about the western point of the gulf and beyond its entrance, each of which was distinguished by one of those honoured names which justly form our country's pride.

At a short distance from Bonaparte Gulf, a large cape juts out, which we termed Brown Cape; the coast afterwards for sixty miles forms hollows inward, projecting again at Cape Correa, opposite to which are nine islands which we named the Groupe of Jerome; the largest of these, Andreoffy Island, is from 12 to 13 miles in length. Beyond is Lemonnier Bay defended by a chain of dangerous reefs. After passing next the Cuvier islets, we found ourselves off Louis Bay, the shores of which measure more than fifty miles; on these we distinguished numerous fires.

At this last point of Napoleon Land islands become more numerous; first the archipelago of St. Francis presents itself, composed of thirteen or fourteen barren and whitish isles, lying at a distance of about twenty-five miles from the continent. Not far away from, and N.E. of this first groupe, are the islands of St. Peter, three in number, and of similar constitution to the preceding. Farther on, and close to the main, are Josephine islands, bristling, I may say, on every side with breakers and shoals. The Ranbarde, a frightful chain of reefs, occupies almost the whole space which divides these islands from those of the archipelago St. Peter, leaving however an excellent passage between them and its southern extremity. West of Josephine Groupe are the islands of the Geographe, a small groupe of four islands, among which several islets are interspersed. Twenty miles beyond, towards the N. W. lie the three islands Jean-Bart: from this last point, to reach the

the islands called La Bourdonnais, requires stretching out fifty miles to the west, whence, to the groupe of Montenotte Islands the distance is S. S. W. forty miles.

Including with these last islands all those which from Wilson's Promontory are scattered off the residue of Napoleon Land, the number exceeds one hundred and sixty: but to these islands in particular, even more than to the continent, is the dismal portraiture applicable which I have had so frequently to exhibit in the course of this history. All, in fact, are low, of a grey, yellow, whitish, or blackish colour; almost universally are they frightfully arid, the majority being destitute either of tree or shrub, the surface being apparently usurped by an encrustation of lichens of gloomy hue. On the largest, that assuredly the least barren of the whole, on Decr's (Kangaroo) Island, which is not less than 70 leagues in circumference, and the interior of which produces thick and deep forests, scarcely were we able by digging into the sand, and by collecting with care the water which trickled from the rocks, to fill a few barrels, and seemingly all the other islands are totally destitute of this article. Can it then be a subject of wonder that these islands are uninhabited by man, or that we should be unable to trace the smallest vestige of their having been peopled, however close their vicinage to the continent? But let us return to the continent itself, abandoned for a while for the picture of its islands.

The reader will undoubtedly recollect that one of the objects most strongly recommended to us in our instructions was to penetrate behind the islands of St. Peter and St. Francis, and minutely survey the whole of that part of the continent covered by this archipelago. Here was expected to be found the strait which dividing New Holland in twain was supposed to join the gulf of Carpentaria. Into this strait it was that the most intelligent naturalists, unable to conceive that a continent so vast should be wholly destitute of rivers, imagined those discharged their waters which they concluded must have existence in New Holland; and this hypothesis was, it must be allowed, in some measure supported by the immense scallop presented by the S. W. coast of this extensive land. Unfortunately this ingenious supposition has not been verified by experience; there are no more rivers behind the islands of St. Peter and St. Francis, than in the residue of Napoleon Land.

In fact, beyond Cape Lavoisier, which forms the N. W. point of the Great Bay of Louis, of which we have spoken, the coast bends inward behind these two archipelagos in a succession of small bays, running but a little depth in land; afterwards it stretches out towards Josephine Islands, and with them forms a large bay, which we shall have occasion to describe with more minuteness, and which we called Murat Bay. Thence to Farewell Cape (Cap des Adieux,) where our survey terminated, and which lies in  $32^{\circ} 19' S. 128^{\circ} 42' E.$  of Paris, the shore continues indented by a number of small bays without any appearance of either strait or river. The whole of this last part of New Holland, although more varied in disposition and aspect than the rest of Napoleon Land, does not appear to be of greater fertility, and that portion which we were enabled to ascertain the quality of by visiting it, too well confirmed the truth of the appearance.

Sterilis profundi vastitas squalet soli,  
• Et fœda tellus torpet æterno sinu. *SENEC. in Herc. fur.*

I have now given a rapid sketch of the general appearance of Napoleon Land; but with what toil and danger was it not obtained. At two different periods had we to visit these dangerous shores; and at either time hurricanes and tempests, shoals and breakers, nearly occasioned our destruction. Twice in the *Geographe* did we attempt to penetrate to the extremity of Bonaparte Gulf, and twice were on the point of perishing there. The *Casuarina* alone was enabled, eight months afterwards, to complete its



its survey\*. The 13th April especially was marked by the most imminent perils; subject to exceedingly heavy squalls, we were all night long obliged to luff up in the eastern gulf, with only a few feet water under the keel, and going (sailant) at the rate of six or seven knots. The night of the 19th was still more dreadful: on this occasion we were in Bonaparte Gulf; the wind blew from the W. S. W. with the utmost violence; the sky was hidden by thick black clouds, which showered down amid vivid flashes of lightening torrents of very cold rain, at times resembling melted snow; the unevenness of the bottom was so great, and its rising so sudden, that until day-break we were every instant obliged to vary our course. Fortunate, uncommonly fortunate, we, by dint of incessant toil and the utmost activity, in escaping the manifold dangers with which we were menaced that night!

Still were not these dangers, however great, comparable with the dreadful ravage occasioned by the scurvy. Already had many of our men been given to the waves, already was half our complement unable to keep the deck, and of our helmsmen two alone were capable of service; while every day this epidemic was making alarming progress. Could it be otherwise? Our allowance was stinted to three bottles of stinking water: during more than a year we had not tasted wine; we had not a single drop of brandy left; and in lieu of these liquors, so indispensable with European seamen, a bad taffia made at the Isle of France, and which there is given but to slaves, was the only substitute, and even of this the ratio was but a gill and a half per man. Our biscuit was full of weevil, our salt provisions rotten, and so offensive, in smell as in taste, that the almost famished sailors, preferring at times the extremities of hunger to allaying its keenness by such unwholesome food, in the very presence of the commander threw it into the sea. Add to this, the sick were without any of those indulgencies or even necessities which physicians deem requisite, without any sympathizing attention on the part of their chief, a solace so grateful to the feelings of all, and so powerful in the alleviation of sufferings and even want. The officers also and naturalists, reduced to a similar allowance with the men, had equal sufferings to endure both of body and mind.

Such was our melancholy condition when, in the morning of the 30th April, we made the islands of St. Peter and St. Francis: solicitous of penetrating behind these islands, and of solving the problems, whether New Holland was truly one continent, and whether any river intersecting it fell into the sea behind these islands, we used all our means for the purpose during eight successive days; but hurricanes, calms, and currents alternately repelled our advance, and the weakness of our crew prevented any but fruitless exertions. We were, therefore, compelled to postpone this important research, and make for the nearest place where our men might recruit their health and strength. The succeeding chapter will exhibit how great the necessity we laboured under of following this plan.

Thus ended our first investigation of Napoleon Land. In the course of forty three days we had reconnoitred more than a thousand leagues of coast, taking into this computation that of the islands and numerous bays we had sailed along from Wilson's Promontory in the S. to Cape Farewell (Adieux) in the N. W. Still several head-lands in this great space had escaped our observation: we had not completed the survey of Decrès's

\* This is apochryphal; it is more probable that the survey, from which the chart yet to be published was framed, is that of Capt. Flinders, stolen from the manuscripts, which were taken from him at the Isle of France by the governor of the island Du Caen, and which were not wholly restored upon his liberation after an imprisonment of upwards of six years; an imprisonment which stigmatizes the governor of the island with brutality, and equally disgraces the government of France, to whom intercession for his release was long made without effect. Tr.



(Kangaroo) Island; nor had we reached the extremities of the two gulfs; Port Champagny remained yet unexplored, and the problem of the integrity of New Holland, a principal object of our mission, was not yet resolved. A second cruise to Napoleon Land became therefore indispensable, and this consideration necessarily induced our commander to direct his course towards the south, that we might winter at Port Jackson.

CHAP. XVI.—*Return to Diemen's Land.—Stay in Adventure Bay.—Arrival at Port Jackson.*

[From the 8th May to 20th June 1802.]

WINTER had now assumed its reign in these southern latitudes, of which we had conviction from the frequency of storms and squalls of wind, and from the roughness of the sea during the latter part of our stay off Napoleon Land: this circumstance, with the state of our crew, seemed to exact we should steer the nearest way for Port Jackson, that is to say, by Bass's Strait; our commander was however of a different opinion, and, without any visible reason for the preference, gave orders to make for the southern part of Diemen's Land. A resolution thus extraordinary occasioned general consternation, and the sad forebodings it occasioned were afterwards but too fatally verified.

On the 9th May a brisk wind from the N. N. E. carried us far to the south: in the night the horizon was one sheet of fire, so incessant were the flashes of lightning; these also were accompanied by very heavy rain.

From the 10th to the 15th we had dreadful weather; big and heavy clouds hung over us, from which poured down continual torrents of chilling rain: the wind blew violently and in squalls, while a thick and penetrating fog loaded the atmosphere and almost suffocated our sailors. These poor fellows were the major part of them covered with ulcers from the scurvy, and every day increased the number of our sick; those even appointed to attend them at length became infected, and among the number was our doctor himself, Mr. L'Haridon.

"We now distinguished a number of albatrosses, the constant inhabitants of the southern seas; the thermometer sunk to 8°\*, and this change of temperature obliged us to take to our winter dresses; our sick painfully felt the alteration.

On the 19th in the morning we discovered Diemen's Land; the Mewstone Rock was visible at noon; by four we were off the Swilly Islands, and hoped by night to be in Dentrecasteaux Channel; but the wind slackening, we lay to under Bruny Island.

On the 20th we found ourselves in the morning very near the land, but owing to the denseness of the fog it was scarcely distinguishable; by nine we saw the entrance of Adventure Bay, and the aspiring columns of a reddish hue of Fluted Cape, starting as it were from the tempestuous ocean. These columns, which rise to the height of four or five hundred feet from the level of the sea, are apparently an enormous pile of basaltic prisms, their bases resisting the shock of the tumultuous waves, which, driven by the south wind from the Antarctic pole, spend their rage against them in vain. This basaltic constitution, which we have previously had occasion to notice on Tasman Island, and some other points of Diemen's Land, or the adjacent islands, is rendered additionally singular from no volcanic indices of any other kind appearing where this constitution was observed.

In front of the Fluted Cape lies the Isle of Penguins, a barren rock thus named by Furneaux, from a species of *sphenicus* observed there by that navigator, which he mistook

\*46, 4° of Fahrenheit.

the penguin. However little the consequence of this mistaken denomination in a geographical view, it is yet worthy of remark as regarding natural history. Indeed, it is now a well established fact, that all the species of the penguin genus are confined to the coldest seas of the boreal hemisphere; while on the other hand the sphenicus antipode of the penguin, if such mode of expression be allowable, received for its allotment the frigid watry wastes of the opposite or antarctic hemisphere.

After passing the Isle of Penguins we were opposite the anchoring place of Adventure Bay. Here at once the aspect of nature undergoes a change; Bruny Island at this point presents lofty mountains, the intermediate vales of which terminate at the sea; from these mountains, clothed with forests even to their very tops, descend a number of rivulets; while the shore is beautifully fringed with a border of trees and shrubs perpetually green. The smoothness of the sea at the extremity of the bay, and the lively verdure of the neighbouring forests, charmingly contrasted with the dull red colour of the Fluted Cape and its tumultuous waves, whose distant roaring continued to strike the ear.

Soon as our anchors were out, several boats were sent on shore to wood and water, and to carry thither such of our sick as were in a state to be moved. I myself landed with my friend M. Bernier, and with him spent the remainder of the day in visiting the extremity of the bay. On the 21st, in the morning, I renewed my researches, and new collections rewarded my second excursion. At length, on the 22d, our commander gave orders to weigh anchor, but so exhausted was the strength of our crew, that to effect this required four hours' exertion. The anchor raised, we hoisted all sail, steering N. N. E. for Maria Island, which we reached in the evening. But before I resume the narrative of our voyage, it is incumbent I should give some particulars relative to Adventure bay.

It belongs to the eastern coast of Bruny Island which, with Diemen's Land, forms the superb channel Dentrecasteaux. The isthmus St. Aignant, N. N. W. of the Fluted Cape, divides the bay from this channel. The land of the isthmus being very low, and its breadth not exceeding a few hundred paces, it certainly appears extraordinary that this channel should successively have escaped the observation of Furneaux, by whom the bay was discovered in 1770, and who gave it the name of his ship; and of Capt. Cook, who, long before Admiral Dentrecasteaux, made some stay in Adventure Bay. The latitude of the bay is  $40^{\circ} 20'$  S. its longitude  $145^{\circ} 12'$  E. of Paris. The topographical plan of this bay, by the skilful French engineer M. Beautemps Beupréc, is equally valuable for the precision of its parts and the general style in which it is executed.

Of all the coast of Diemen's Land and of the adjacent islands this is assuredly the best watered, and consequently, the most interesting to navigators; it is perhaps the only one where at all seasons one or more ships may depend on readily obtaining a supply of water. This advantage appeared to me ascribable less to the height of the mountains and thickness of the forests than to the nature of the ground, which every where, in this part, is composed essentially of granitic rocks of a fine grain, covered by an argillaceous stratum, and this supporting a superficial bed of vegetable earth. From this structure results, that the rains and dews, with the water deduced in even greater abundance from the fogs and clouds condensed by the mountains, being stopped from filtering through the beds below, are necessarily constrained to run on the surface, where, independent of the numerous streamlets I have noticed, many ponds and pools of sufficient extent to support some fresh-water fish, are found.

Of the small number of meteorological experiments I was enabled to make in Ad-

venture Bay the result was, that the thermometer on shore in the day time varied from  $6^{\circ}$  to  $10^{\circ}$  †; that the mean elevation of the mercury in the barometer was  $28^{\circ} 1, 4^{\circ}$ ; that the hygrometer denoted  $92^{\circ}$  to  $97^{\circ}$  of moisture; that on the night of the 20-21st the phosphorescence of the sea was exceedingly vivid; and that the temperature of the sea its surface was, but in the slightest degree, greater than that of the atmosphere.

The vegetable and animal productions resembling those of the channel Dentre-casteaux, presented scarcely a new object; I merely noticed a kangaroo, smaller than that of Diemen's Land, and which most likely should be classed as a distinct species. Black swans and pelicans, so common in the channel, were not to be found in Adventure Bay, a circumstance I conceive to be attributable to the less peaceful character of the waters of the bay. Two sharks, from nineteen to twenty-five decimeters long †, were the only new species of fish I found: one of them, (*Squalus rhinophanes*, N.) is remarkable on account of the unusual transparency of its long muzzle; the other, (*Squalus cepedianus*, N.) has on each side seven vents like the *Squalus perlon*; but it differs from this materially in its teeth, which seem to me of a shape and disposition hitherto unobserved in the numerous family of sharks. Our collections were farther enriched by divers molluscæ, crustaceous animals, and insects, little remarkable in themselves, a very large crab excepted, and a forficule, (ear-wig,) somewhat analogous to the *forficula bi-punctata*, Lin. but differing in its colour, which is reddish, in having a black spot near the point of the elytræ, and in the number of the articulations of its antenna; &c. I have described it under the name of the *forficula antarctica*.

From what I have before related of our intercourse with the inhabitants of Diemen's Land, it will be seen, not only that those of Bruny Island belong to the same race, but also that they alternately transport themselves from the one to the other of these countries. It is probable that, at the period of our anchorage in Adventure Bay, they were on the opposite land, for we found no trace of their residence here at this time. It likewise seems that this portion of Bruny Island is less frequented by them than the opposite side of Diemen's Land, owing, I concluded, to the scarcity in Adventure Bay of the great haliotes, turbos, and large oysters, on which they chiefly subsist. To make amends, in summer, when the springs are dried up on the shores of the channel, this spot is capable of furnishing them with sufficiency of water. But let us return to our voyage.

After doubling Maria Island by the south, we made for Schouten Island; passing in the morning of the 24th the Strait of the Geographe, Cape Degerando, Cape Tourville, &c. we steered for Cape Lodi, endeavouring to keep close in with the shore to observe some points which had escaped us on our first course along this coast: but these stormy seas had now become untenable; storms and hurricanes assailed us every day, thick fogs hanging in the air allowed us scarcely to distinguish the highest mountains of Diemen's Land; and the waves beat with fury on all sides against their granitic flanks. Moreover we had frequent thunder; and, in the morning of the 3d June, abundance of hail of a large size fell in repeated storms; both these electric phenomena were the more remarkable from the season of the year, and the state of the atmosphere being naturally unfavourable to their exhibition.

In the mean time the number of our sick increased every day in an alarming degree. Each returning morn witnessed the commission of one or more of our unfortunate companions to the waves: and such indeed was the diminution of our strength, that we were unable to make a tack without summoning all hands on deck, so completely had

\*  $42,8^{\circ}$  Fahr.

†  $50$  Fahr.

† 6 to 8 English feet.

the constant watching and fatigue exhausted the vigour of the few who still enjoyed their health.

On the 2d and 3d of June we had very bad weather; torrents of rain fell without intermission, and the violence of the squalls of wind exceeded all we had experienced before. On the 4th the fury of the tempest was such as made us regard as trifles the event we had hitherto known. Never did gusts succeed each other with like rapidity; waves never ran so high nor in such confusion: the sides of our vessel beaten by them at every instant seemed ready to open from the force of the shocks; our mizen-mast was carried away, with all our five-rails to leeward; our anchors even were almost forced from their places, notwithstanding the strength of the tackle with which they were fastened; we were obliged to lash them anew, and the ten men who alone remained of all our crew were employed on this object during great part of the day. All night long the storm continued: the rain fell in torrents, and the sea ran frightfully high; the darkness scarcely admitted of our executing the most simple manœuvres, and the whole of the interior of the ship was drenched with water. Four of the remaining crew were added to the sick list, and the six who were yet able to keep the deck were overcome with fatigue and exhaustion. The sick between decks made the air ring with cries of agony: no, never could even fancy imagine a more afflicting scene; and its horrors were augmented by the general consternation. We were on the point of being obliged to leave the direction of the ship to the mercy of the waves; clew lines were added to all the ropes, yet scarcely could we shift our sails. We had not an instant to lose. Assuredly, our commander had too long deferred making for port.

It had long been necessary indeed we should hasten our course to Port Jackson. "At this time," says our commander in his journal, and with great truth, "I had but four men in condition to keep the deck, including the officers of the watch." From these few words a judgment may be formed of the ravages effected by the scurvy. Not a single person on board was exempt from it, nay even some of our domestic animals were affected, and two rabbits and a monkey belonging to one of the crew died in consequence. In midst of all these calamities, our second physician M. Taillefer did himself the greatest credit by his kind attention and zeal: the only one of our doctors capable of rendering any effective service to the sick; he was constantly employed night and day in tending them, and was at once their surgeon and physician, their comforter and friend. The afflictions so immediately beneath his eye he has lately pictured in his initiatory dissertation. "All," says M. Taillefer, "united to overwhelm our sick: having no other food than meat in a state of putrefaction, and worm-eaten biscuit, for beverage but corrupt and stinking water; destitute at the same time of any efficacious medicaments; shut up in a narrow vessel the sport of the winds and waves, and far from a place at which we might recruit, the malady increased in inveteracy every day. On the bodies of the sick, in different parts, tumors arose covered by black scabs; the whole of the skin presented at the root of the hair small round spots of the colour of wine lees, their joints became stiff, and the muscles were contracted, and kept the limbs of the unfortunate sufferers half bent: but nothing can surpass the hideous aspect of their countenance: to the livid complexion common in scorbutic affections was added a swelling of the gums, which protruded beyond the lips, and exhibited some parts mortified and others covered with ulcers: their breath was of such foetid nature as when inspired it seemed mortal. How often, in rendering them succour, was I on the point of fainting! The state of inanition in which these unfortunate beings was plunged did not however prevent their having a full use of their intellectual faculties; though their sense of perception served but to make them feel more keenly their frightful and desperate condition.

On the 5th of June the storm had not yet entirely ceased, but as we were now clear out at sea, and made much way towards the north, its violence was less distressing. We passed in the night the southern point of New Holland, designated by Cook by the name of Ram's Head. On the 7th we lost Racine, our purser's mate, one of the most robust and estimable men of our crew.

From the 7th to the 15th the bad weather continued uninterruptedly. In the night of the 14-15th we had much thunder; hail-stones fell of very large dimensions, and the lightning was so vivid and frequent as to dazzle the sight.

At length on the 17th we descried from the mast-head a sail, on an opposite tack, which seemed to wish to hail us, and in a little time she was alongside. The captain came immediately on board, and informed us he was two days out only from Port Jackson, on a fishing voyage off the coasts of New Zealand; that M. Flinders had been some time at that port; that the Naturaliste had arrived there several days before, and had failed again in search of us; that the boat we had been obliged to abandon on the eastern coast of Diemen's Land, had been met with by an English vessel belonging to Port Jackson, and with its crew, was on board the Naturaliste; that we ourselves were impatiently expected in the colony, where orders from the English government had been received that we should be treated with the greatest respect, and that we should meet there with every assistance of which we stood in need; finally, he apprized us that, only a few days before, official intelligence had arrived of the conclusion of peace between England and France; and what we learnt of its conditions giving a new value to this grand event, the cries of anguish were for an instant suspended, and in their stead resounded shouts of joy, and expressions of gratitude towards that great man whose name was connected with this glorious pacification.

We had now been several days abreast of Port Jackson, without being able, owing to the extreme weakness of our crew, to execute the manœuvres requisite for navigating our vessel into harbour. How great then was the general joy when on the 20th we distinguished a large English boat making towards us! We learnt from the officer by whom it was commanded, that we had been seen from different parts of the coast by persons on the look-out for three days before; and that the governor, rightly imagining by our manœuvres, that we were in the most pressing need of succour, had expedited this boat with a pilot and the men necessary to conduct us into port. There, thanks to this powerful assistance, we speedily found ourselves at anchor.

Thus terminated this long voyage, one of the most deadly the history of navigation can produce, and to which the whole of the crew was on the point of falling a sacrifice. At this instant, in fact, almost all of those afflicted with the scurvy were so ill, that a very few days would have carried off half the number; two of them, indeed, expired the day after our coming to anchor; but, these unfortunate men excepted, all recovered with a celerity which appears truly astonishing. What, then, can cause this magical effect of land and vegetables on a malady against which the medical art in vain exhausts on board of ship its most active and efficacious remedies\*?

\* In lieu of some following remarks of M. Peron, by no means interesting to Englishmen, on the means of preventing the scurvy on board of ship, the instance of Captain Flinders, who strictly followed the prescriptions of Captain Cook, may be adduced to shew, not only that the *theory* of preventing the ravages of this dreadful malady at sea is well understood by us, but also the *practice*. So far from sharing the sickness which so dreadfully afflicted the *Geographe*, and of which such an afflicting picture is drawn, Captain Flinders, sailing through the same seas, and undergoing equal hardships, on his arrival at Port Jackson, had *every man* of his crew doing duty upon deck, and in such a state of health as to be distinguished in New South Wales for men who had fresh arrived from England." Tr.

CHAP. XVII. — *Operations of the Naturaliste in Banks's Strait, the Furneaux Islands, Kent's Bay, Clark's and Preservation Islands, Cape Portland, Swan and Waterhouse Islands.*

[From the 8th to the 19th of March 1802.]

THE reader will doubtless recollect the separation of the *Naturaliste* and the *Geographe* on the eastern coast of Diemen's Land. Before I enter on the particulars of our sojourn at Port Jackson, whither the *Naturaliste* returned a few days after our arrival, it seems indispensable not to invert the course of events, I should previously detail the results of the individual exertions of those on board in this last part of her navigation. In the description, Messrs. Boullanger, Freycinet, and Bailly, shall themselves be the chief narrators of the different events that occurred.

"Spite of our following the only course we conceived the *Geographe* could take, we were unable," says M. Freycinet, "to keep her in sight. Her superior sailing, the multiplicity of her unsignaled tacks, and the bad weather we experienced throughout the whole of this same night, will sufficiently explain the separation that took place.

"On the 8th March we made towards land, in hopes of falling in with the *Geographe*. At four in the evening, our men on the look-out perceiving a sail in the east-south-east, we had no doubt of its being our consort, and made sail towards the vessel, but found it to be an English brig, called the *Endeavour*, the captain of which informed us, that she was fourteen days from Port Jackson, on her way to Maria Island, to catch seals. This brig was built at that port; her hull was of casuarina wood, and her masts of the eucalyptus. After giving information to the captain of the spots where seals most abounded, we left him to continue our researches.

"Very early on the 18th, we distinguished another sail under the same tack as ourselves, which proved an English brig: in a little time a boat was lowered from her, which made towards us. What was our surprise on perceiving it to be that of the *Geographe*, with, on board of her, Messrs. Boullanger, Maurouard, and the eight sailors who had accompanied them! Persuaded of their having rejoined their ship on the 6th March, we had felt no anxiety on their account, though, but for the fortunate rencounter which chance threw in their way, their lot had been truly deplorable.

"We learned from M. Boullanger, that, after vain endeavours in the evening of the 6th, to rejoin the *Geographe*, M. Maurouard and himself, resolved on anchoring under shelter of the coast; that they had spent the whole of the 7th in coasting along the shore, and continuing the survey of the preceding day; that forced again to pass the night at sea, they had suffered greatly from cold, rain, and a violent gale from the south-west. "Judge," says M. Boullanger, "of our horrible situation: the small portion of food and water we had taken with us for one day's provision on leaving the ship was expended; we were sinking under fatigue and want of sleep; our cloaths were drenched with sea water; while, exposed in a frail skiff to all the rage of a stormy sea, we suffered the most cruel suspense at a separation on the length of which we could make no calculation."

The 8th March, our companions continuing their course towards the north, fell in with a large flight of cormorants; they killed some of these; and fortunately discovered Maurouard Island, on which they were enabled to renew their provision of fresh water: they passed the night here to recruit their exhausted powers.

The



The 9th at day-break, they continued their course towards the north, keeping very close in land, and continuing their survey with a steadiness highly honorable under similar circumstances. At half past four they had sight of Furneaux Islands; at five they anchored for the night, under shelter of the singular rocks described in Chapter XIV. Scarcely had they sought this refuge before they perceived a sail; they made towards it, and found it to be the English brig Harrington, of 200 tons, commanded by Captain Campbell.

"This generous Englishman," continued M. Boullanger, "received us in the most obliging manner, and kindly granted whatever we required for ourselves and crew. On board of Captain Campbell's ship we were served with excellent salt provisions, potatoes from Port Jackson, and biscuit baked there. The brig he commanded had been built in the docks of that colony, and was bound for Bank's Strait, to load with seals skins collected there by men left for the purpose at the Furneaux Islands, King's Island, &c. Nevertheless, Captain Campbell obligingly offered to carry us to Port Jackson, provided in the few days he would be occupied in examining Dalrymple River and the Western Port, we should not fall in with our vessels. He proposed in the interval to leave us on the Furneaux Islands, whither he would return for us at the stated time. We felt duly grateful to M. Campbell for his liberal kindness, but observed to him at the same time (through an interpreter), that we could not so soon resolve on giving up search of our vessels, as by cruising a fortnight longer at the entrance of the strait, we hoped to meet with them; we consequently besought him to spare us a sufficiency of provisions for that space of time, and, in case of the failure of our hopes, to enable us afterwards to reach Port Jackson. Not only did this generous captain readily comply with our request, but of his own accord offered us much more than we had presumed to ask; he promised us moreover a chart, tables of the declension of the sun, which we needed to direct us on our course, and a store of powder and shot.

"Things being thus arranged with M. Campbell we passed the night very pleasantly on board the Harrington, all of us penetrated with the most lively sentiments of gratitude at a demeanour so markedly attentive and kind. It did indeed receive additional value in our eyes, from the political situation of our two nations in Europe; the English Captain having himself informed us that the war continued to be prosecuted with greater fury than ever.

"The 10th March in the morning, we were preparing to bid adieu to Captain Campbell, to begin our cruise in front of Bank's Strait, when a large vessel was distinguished from the mast-head, which we soon knew to be the Naturaliste: bidding now farewell to our hosts, we took to our boat, and in a little time reached the French ship, happy in having thus escaped the various misfortunes which a separation like ours might have occasioned."

The narrative of M. Boullanger not admitting a doubt but the Geographe was still in the south, Captain Hamelin resolved on waiting for him in Banks's Strait; in consequence he, in the evening of the 10th March, anchored near Swan Island. The 11th at day-break, Messrs. Boullanger, Freycinet, and Crieg, were dispatched with the boat of the Geographe to Portland Cape, carefully to observe its position. The 12th, Messrs. Mauregard and Boullanger went in the boat to complete the survey southward of that part of the coast comprized between Swan Island and the Point of the Naturaliste, where their former survey had terminated. Lastly, on the 13th, at half past eight in the evening, M. Faure was sent in the long-boat of the Naturaliste to visit Kent's Bay, accompanied by M. Bailly.

The



"The 14th," says M. Freycinet, "the wind veered from the north-east to the east-south-east, and blew with such violence that our anxiety became general for the fate of the two boats at sea: our own immediate safety was next a subject of apprehension. At four in the afternoon, our larboard cable cut; we immediately let go our starboard anchor, using the customary precautions, but scarcely did the cable feel the stress of the ship, before it likewise sprung: thus in an instant both our heavy anchors were lost, and we were reduced to the only alternative of getting under sail, notwithstanding the danger to which we exposed our boats by thus abandoning them. The storm continued to the 18th March, obliging us to keep constantly tacking in the strait, Captain Hamelin preferring to run every risk, rather than expose his boat's crews to destruction."

The boats rejoining the ship on the 18th, we neared Waterhouse Island, to look for the *Geographe*. Our search being fruitless, we again steered for Swan Island, in order to drag for the anchors; but, notwithstanding all our efforts, we were unable to discover the least trace of them: our captain now resolved on cruising some days in the opening of Bass's Strait, intending afterwards to proceed directly to the south in search of our consort, which he had every reason to imagine still in that quarter. But before we accompany him thither, let us trace the interesting results of the mission of M. Faure to the Furneaux Islands.

Dispatched, as we have previously said, on the evening of the 13th March, to reconnoitre Kent's Bay, situate between the Furneaux Islands, Clark's, and Preservation Islands, Messrs. Faure and Bailli sailed all night through with foggy weather. On the next day, luffing up to make the last of these islands, they lost their mizen mast, which was split by the violence of the wind; favoured, however, by strong currents they reached the island.

"Preservation Island, thus named," says M. Bailli, "from its situation at the entrance of Kent's Bay, which it protects from the west winds, is surrounded by a great number of rocks and islets, which serve as a retreat for innumerable flocks of seals. It is itself nothing but a large granitic plateau, raised about 100 feet above the level of the sea: the coast of the island is indented by an infinite number of sandy coves, but in front of them, as if to interdict all entrance, lie a groupe of rocks, against which the sea beats with violence. The chief of these rocks are breakers covered by a few feet of water, but some rise to a short height above the surface.

"The granitic rock which forms the entire substance of Preservation Island, is covered with a thin stratum of earth, deep enough however to nourish some small trees, and a tolerably thick herbage. Under this a prodigious number of sphenisci, of a white and blue colour, (*aptenodytes minor*, Forster) form their nests in burrows between the roots of trees, and of the strong grass with which most of the island is covered; but where grass is wanting, they burrow in the ground. In such places walking is very laborious, as the ground is like a warren, and exposes the traveller at every step to sink in it up to the knees. Throughout the whole of the day these *aptenodytes* nestle in pairs in their holes, but soon as night approaches they flock in numbers to the shore in search of fish and other animals they make their prey; nor do they return to their asylums before the break of day. In order, no doubt, to make their burrows more warm, they cover the bottom with dry leaves and feathers; here it is that they rear their young, until they are able to proceed to the shore and seek support for themselves. These birds are not very wild, and only defend themselves with their beak on any one attempting to take them: apparently they are very fond of warmth; for, in the night time they flocked to our fires, and often exposed themselves

to be burnt. One of our sailors, wrapt up in a blanket, was so perpetually assailed by them, that he was unable to sleep, the birds, with inconceivable obstinacy, persisting in sharing his covering, and getting between it and his body; and, though in his vexation, he killed several, the survivors still returned to the charge. These birds have a very piercing cry, resembling that of the duck. As this was not the season of their laying their eggs, we found none; but almost every nest contained two young birds, pretty strong, and tolerably fledged: from this circumstance we concluded that this species of *spheniscus* sets but on two eggs. The flesh of this bird is disagreeable to the taste: the fat is so oily as to melt with the least warmth, and being mixed with the whole substance of the animal, gives it an ologinous and nauseous smell. Broiled on live coals, the aptenodytes acquire a taste differing little from that of pickled herring, and only in this manner cooked did we find them eatable.

“ The north-east coast of Preservation Island is at the same time the most healthy, and affords the best shelter; the southern coast on the contrary, bristling with breakers and reefs, is inaccessible. Many remnants of the wrecks of vessels of various dimensions are strewed all over the island, proofs of the frequency of tempests here, and of their fatal consequences. The shipwreck of the Sydney, a vessel belonging to the colony, is especially remarkable on account of the following circumstances. Of the whole crew seventeen alone were saved. After remaining some time on Preservation Island, they determined on gaining the continent of New Holland, and returning by land to Port Jackson. They succeeded in effect on meeting together at Wilson's Promontory, whence they began their march for the English settlement, more than 200 leagues distant. On the way they had to struggle with all the horrors of hunger and thirst; were much incommoded by the hordes of savages who inhabit these dismal coasts, and had many skirmishes with these ferocious men. Three only of these unfortunate men succeeded in overcoming the obstacles and dangers of this journey; fourteen perishing either of fatigue or in the different attacks of the savages.

“ The most remarkable circumstance in a geological point of view presented by Preservation Island is the following: in the southern part, that the most wild and barren, on mounts of tolerable elevation, large insulate blocks of granite are seen standing as if in equilibrium on the ground, and without apparently being connected with it.

“ In some parts of the island, those especially at which the unevenness of the surface ceases, are small spots covered with a lively verdure, maintained by the greater moisture of their low position. Here live in peace and without dread of man a species of goose peculiar to New Holland: it is of a brown colour, covered with spots the third of an inch in diameter, and of the same colour as the rest of the body, but of a deeper shade. These geese are rather tame, and so willingly allowed our approaching them, that we caught a sufficient number to support us during the two days we remained on the island, without the least difficulty. It was not however, I imagine, the first time they had been attacked in their peaceful retreat; for at a short distance from the spot where they flocked in greatest number, we saw the wreck of several huts formed of poles fastened together with hempen cord, and which had doubtless served as an asylum to some of the sailors, the frightful wrecks of whose ships were seen in every part.

“ At the summit of the largest trees of Preservation Island, which do not exceed twelve feet in height, nests of birds are found formed of small branches of trees interwoven with much nicety. These nests are ninety-seven centimeters in diameter \*.

\* 38 inches English.

and more than thirty-two centimeters \* thick. They are sufficiently solid, as I proved, to bear the weight of a man: when we saw them they were abandoned: but they were covered by a thick layer of fresh dung.

"The fury of the storm which had hitherto detained us on Preservation Island having at length abated, and the rain having ceased, we hastened our departure, and in the morning of the 15th steered for Kent's Bay. By noon we found we were off the north-west side of Clark's Island, at which we landed. The shore is formed of large detached blocks of granite; the number of lofty trees is inconsiderable, but smaller ones and shrubs are abundant. In order to advance into the interior, we found it necessary to climb up enormous masses of rock, the nakedness of which testified the violence of the wind off the coast.

"Shortly after leaving Clark's Island we reached at the opening of Kent's Bay. The coast of this bay, on the east and west, consists of high lands; at the extremity, is low, sandy, and well wooded; it forms a narrow isthmus, and in this respect the constitution of the Furneaux islands perfectly assimilates with that of the peninsula Freycinet, and that of Maria Island, the Forestier Peninsula, &c. Kent's Bay is far from offering those advantages which might be expected from its size and position: in fact, a sand-bank, which has scarcely enough water on it to admit a boat to pass, closes the bay on the eastern side, and in this direction occupies almost half its extent. On the west are rocks, which render the navigation dangerous, and anchorage even difficult; if to these circumstances be added that this large bay is almost wholly exposed to the south winds, those the most stormy in the Austral Ocean, it will doubtless be allowed that its utility to navigation can never be very great.

"Of different value is a sort of small port comprized between Clark's and Preservation Islands and the most southern of those of Furneaux; it is safe and commodious: it is three miles in length by a medium breadth of one and a half, and has good anchorage from six to fifteen fathoms water, with a sandy and muddy bottom: finally, it is so completely surrounded by the neighbouring lands, that it would be defended from all winds if those from the east to west passing by the south were not occasionally felt, the lands which should arrest the violence of these winds being very low. Still, it should seem, the sea here can never run very high; for though we were in this port during a gale, we were able to effect a landing with ease in any part. I have no doubt therefore, when the eastern passages shall be better known, but this port will be much frequented by fishermen, its disposition being such that, let whatever wind prevail, it may be entered and quitted with the wind abaft. As for fresh water, it is produced neither on Preservation nor Clark's Island; I am even ignorant whether any is to be found on this one of the Furneaux Islands; but every part of this island contiguous to the port being covered with lofty and well-wooded mountains, and the coast here being indented by deep bays, I am inclined to believe that a search here would be repaid by discovery of one or more springs, sufficiently copious to answer the wants of navigators. But let us return to the prosecution of our voyage.

"Leaving Kent's Bay, we bore for the northern part of Clark's Island, where we landed by fall of day: the coast on this side is low, and formed of rocks disposed in vertical beds parallel to each other and to the shore.

"At a few paces from the shore the country is covered with shrubs and small trees; but no trees of large growth are seen as on the Furneaux islands opposite to Clark's Isle: that we found no fresh water caused us less astonishment from the island consist-

ing, as we have before noticed, of a granitic plateau, of little elevation above the sea, and only thinly covered with a stratum of vegetable earth. These dismal shores, like those of Preservation Island, were strewn with wrecks, and among the vestiges of them we discovered the carriage of a gun, and the remnants of a case with the East India Company's mark. On this island are found vast numbers of seals of a middling size, covering the rocks and islets by which it is surrounded: the seal-fishery would consequently be as easy of effect at this point as it would be profitable, nor will the English, we may presume, be tardy of availing themselves of this branch of commerce.

The 17th of March, in the morning, we steered for the anchorage where we had left the Naturalist, but not finding her there, and the thick fog with which the atmosphere was loaded preventing our keeping the sea, we landed on Swan Island. This island, placed at the entrance of Banks's Strait, is low; its base is formed of black amphibolous granite, on which are small tumuli of sand, the substratum with which almost the whole island is covered: these tumuli produce some shrubs. An excellent level beach allows of easy access to the island, and the shore is indented by small coves pretty secure for boats and vessels of light burthen. Seals are plenteous on the coasts of this island: here also is found a great number of wild geese of the same species as those of Preservation Island. We did not indeed find any running spring here, but readily obtained what water we wanted, by digging a well some few feet deep in a hollow, in which from the nature of the surface we judged the waters must drain.

After some hours' rest in Swan Island, we left it for that of Waterhouse, the rendezvous appointed for the Naturalist. In a little time we doubled Cape Portland, a low land, covered with bushes, but of granitic structure: here is seen a vast flat, which in tempestuous weather we presumed is overflowed by the sea, as it is wholly destitute of trees, and covered with mud. This part of Diemen's Land is inhabited by a number of small animals resembling the kangaroo-rat: one of them we caught, but unfortunately it has been lost. At distance in the interior are forests of very beautiful trees, which extend till lost in the horizon. For five or six leagues from the shore the country is flat; but at that distance lofty mountains are seen, apparently forming a chain running from south-east to north-west. The whole coast that bounds the cape eastward is difficult of approach, on account of islets scarcely covered by the sea. West of Cape Portland is a great bay promissory of good anchorage, secure against winds from the east to the south-east, and from the south to the south-west; the depth of water is pretty great, and a landing easy.

Waterhouse Island, on which we landed at six in the evening, appears to be an elevated plateau from one hundred and fifty to two hundred feet above the level of the sea, sloping on the northern, eastern, and western sides, but abrupt and perpendicular on the southern. The base is a black, amphibolic granite, like that of Cape Portland and Swan Island, on which are incumbent horizontal beds of free-stone. The whole of the upper part of the plateau is covered with large trees; while those on the slopes, very close to each other, especially near the ravines, are of a smaller size. These small trees keep the earth constantly moist, and beneath their shade a vast number of rills of fresh water supply a sufficiency of that article for the wants of the people settled there. We saw here a vast number of sphenici of the same species noticed on Preservation Island, besides a small animal, which the crew at once termed a rat, but which every thing announces to belong to a different species. The hair of this animal is long and silky; its colour a yellowish grey; it is moreover so little timid, that numbers of them

them came close to us to eat the remnants of our meal. One of our seamen took hold of one even without its appearing to be alarmed. Waterhouse Island is much resorted to by seals, some of which are of enormous size. Ribs of whales are likewise seen in great number thrown on the beach by the sea.

"The next day at day-break all were on the look-out for the *Naturaliste*, and her not appearing excited great anxiety; we began to form the most gloomy conjectures respecting her fate and that reserved for ourselves, when at length we distinguished this vessel luffing up in front of the island: we immediately embarked, and shortly joined our companions, all of us alike happy in having escaped the dangers with which during the five previous days we had been menaced by the tempest in Banks's Strait."

CHAP. XVIII. — *Operations of the Naturaliste in Banks's Strait: northern Part of Diemen's Land; Dalrymple River; Wilsen's Promontory; Western Port.*

[From the 19th of March to the 28th of June, 1802.]

THE *Geographe* not yet making her appearance in Bass's Strait, and every thing combining to satisfy us that she still must be in the south, Captain Hamelin resolved on seeking her there. For this purpose we sailed on the 21st of March, and by the next day were off Cape DeGerando. Six days were employed cruising on different tacks along the eastern coast, where no traces of our commander appearing, M. Hamelin was obliged to hasten his return to Bass's Strait: but a junction had now become impracticable, the *Geographe* having already begun its excellent survey of Napoleon Land.

Disappointed in every instance of his search, but confined by the most positive orders, Captain Hamelin again neared Waterhouse Island; and in order to reap all possible advantage from his obligatory stay in Bass's Strait, he dispatched Messrs. Faure and Freycinet to Dalrymple River, with orders to verify the chief details of the English chart, and see to what extent it might be relied upon. These gentlemen did not return till the 7th, when M. Freycinet rendered an account of the result of his expedition. From him we learnt that the currents run very strong at the mouth of this river, and that the entrance to it is obstructed in such manner by rocks and sand-banks as to render it somewhat difficult of navigation. "But" (it is M. Freycinet who speaks for himself) "as its breadth is great, when the passages shall be better known, the entrance into this river will present no real danger; on both the one and the other bank is observed a great number of small coves, in which vessels may find shelter from the winds and currents.

"The chart of M. Flinders pretty clearly points out the principal features of the river's course; but it contains much incorrectness, which we found it more easy for us to distinguish than amend, the period appointed for our return on board not admitting us to enter into the detail of the geography of this interesting river.

"The land on its banks appeared to me of excellent quality in general; vegetation is very flourishing in every part, and the country is well wooded, though the trees do not appear to me fit for ship-building.

"Throughout the whole extent we examined, the water of the river is so salt as to be unfit for drinking. The same remark also applies to the rivulets which fall into it, some only excepted which bring down fresh water.

"For the coast of Diemen's Land comprized between Waterhouse Island and Dalrymple River, it is low and covered with trees: in the interior, and especially on the

the left bank of the River, very high mountains are seen, some of which appeared to us arid, and as if composed of rocks utterly bare.

Still uncertain of the fate of the *Geographie*, but a faithful observer of his orders, M. Hamelin proceeded to the survey of Wilson's Promontory, and cruized off that point, while several boats were sent to complete the geography of the coast. M. Boulanger, the engineer, in one of these boats, was directed to reconnoitre the promontory, the rocks in its neighbourhood, and the portion of land westward, between the promontory and the entrance of the western port. The geographic engineer, M. Faure, with two boats, commanded by Messrs. Milins and Brevedent, bent his course towards the western port itself, in order to verify the English chart, to correct it, or, in case it was found too full of errors, to draw a fresh chart.

This last operation took up eight days, the result being that the English chart was in every respect very defective; that the large peninsula, marked in the chart of M. Flinders as occupying the whole extremity of the port, is in truth an island, the tour of which was, for the first time, made by M. Brevedent, and which we named *L'Isle des Français*, (Frenchmen's Island); that the western port has two entrances, one on the east impassable for large vessels, the other on the west divided into two distinct passages by a large sand-bank in the middle of the channel; that this port has every where good anchorage, and is sufficiently capacious to contain a great number of ships of any burthen; that landing is easy of effect; that the base of the land is a reddish granite of middle-sized grains surmounted by beds of free-stone; that in many parts are streamlets of fresh water, competent to supply shipping; that the soil is fertile, vegetation extremely active, and the country well wooded; in short, that the Western Port is one of the finest in nature, and unites all the advantages calculated to render it at some future period a valuable settlement: the rise of tide is commonly from 16 to 19 decimeters \*; but, apparently, under peculiar circumstances, it rises 49 decimeters †.

During their stay at Port Western, our companions had an interview with the savages of this part of New Holland. The human species seemed to them but thinly scattered on this point; such of the natives as they saw shewed themselves mistrustful and perfidious; their language seemed to resemble that of the inhabitants of Diemen's Land only in the extreme rapidity of utterance; moreover, in their features, the shape of the head, the smoothness and great length of their hair, the inhabitants of the promontory are perfectly different from those of Dentrecaux Channel: their teeth are handsome and well set, and it does not appear they have the practice of knocking out any of those in front; the food of these people consists chiefly of shell-fish; they paint the body and face with stripes, crosses, white and red circles, and pierce the gristle of the nose, through which they thrust a small stick 15 to 18 centimeters long ‡; like the aborigines of Port Jackson, they wear, collar-fashion, a sort of necklace, formed of a number of short tubes of coarse straw; like these last people, and those also of Diemen's Land, they blacken their body and face with powdered charcoal. Of thirteen individuals seen, one only was clothed with a black skin, the other twelve being wholly naked. In order to warm themselves, or possibly out of mere wantonness, they kindle in the woods the most destructive fires. Such are the observations collected respecting the people of the southern point of New Holland. However incomplete, they apply with such equality to the different tribes, whose curious history we shall have elsewhere to present, that no doubt can be entertained but all of them are of one race.

Upward of from 5 to 6 feet English. \* † 16 English feet. ‡ From 6 to 7 inches English.



At this epoch Captain Hamelin found himself in a very embarrassed situation: he had traversed the whole of Bass's Strait without meeting with the *Geographe*; his stock of provisions was so nearly exhausted, that he had not sufficient to last till he reached some port in the Indies; and before he went thither he had to complete the survey of the south-west coast of New Holland. In this extremity, the only plan he could adopt was to steer for Port Jackson. After the return therefore of all his boats, he traversed the strait, doubled Cape Howe, the most southern of those discovered by Cook, on the 20th April, from this point steered N. E. by N. and the next day was in the latitude of Dromedary Point, precisely on the same day and at the same hour that it was discovered by the immortal Cook, thirty-two years before; and on the 24th April was in sight of Port Jackson, in which the next day he cast anchor.

War still continued between France and England; the famous northern confederation, by placing Great Britain on the very verge of destruction\*, had rendered more inveterate the sentiment of national hatred, and Captain Hamelin had reason to fear that he should not have been allowed to remain in the port, or at least, that those succours would be refused him which he came there to seek. But short was his anxiety; the English received him from the first instant with that noble and righteous (*grande et loyale*) liberality, which can only be accounted for, or have been produced, by the perfection to which civilization has arisen in Europe. The first houses of the colony were open to our companions, and during the whole of their stay, they experienced that delicate and endearing hospitality, which does equal honour to those who practise it, and those who are its objects. The whole resources of the country were placed at the disposal of the French captain; and already Captain Hamelin was laying in a complete stock of provisions, to enable him to make the survey of the south-west coast, when he was plunged into a sea of doubts (about how to act) by the arrival of Captain Flinders at Port Jackson. On this occasion he learnt that the *Geographe* had been on this very coast several months before; and, as the commodore had several times repeated to him, that after this voyage he intended to proceed to the Isle of France, he at length resolved on proceeding thither: in consequence, he hastened his preparations, and set sail the 13th May in the morning, leaving behind him M. Milius, who was very ill.

A few days before the departure of the *Naturaliste*, official intelligence had been received of the conclusion of peace between France and Great Britain. This event, however, could add nothing to the friendly sentiments of the English at Port Jackson; but was a subject for great rejoicing on the part of our companions. The reflection to them was grateful, in fact, at the instant of their departure, that they were about to find their country happy and at peace, and governed by the same man who had effected such miracles to insure that happiness, and that wished-for peace. Vain delusions! the demon of war had not yet satiated his rage, and even our comfort, as we shall elsewhere notice, was nigh becoming one of his earliest victims.

\* En mettant la Grande Bretagne a deux doigts de sa perte. The assemblage of wise men on this expedition must have had very crude ideas of the power of Great Britain, to fancy that even her children were alarmed at this northern confederation, much less that it could have intimidated the government, or have rendered so inveterate the sentiment of national hatred, as to occasion either that government or its servants, to depart from a promise given. The confederation, indeed, was inimical to the interests of Great Britain, and in consequence was crushed. The thunder of one armament, under the immortal Nelson made the parties to the confederacy abandon their pretensions and sue for peace. So much for placing Great Britain on the very verge of destruction. T.

Satisfied



Satisfied from his own experience, and by all he had heard at Port Jackson, of the danger to be apprehended in Bass's Strait, Captain Hamelin first resolved on bearing directly towards the south, to double the austral point of Diemen's Land; but in order to shorten his course, he determined to attempt, at least, the passage of the Strait; but repeatedly driven back by the western winds and currents, by storms and bad weather, he returned to his primary intention of doubling the South Cape.

The 5th of June he found himself in latitude  $44^{\circ} 55'$  S.: the sea ran dreadfully high, and the wind blew with violence, and in outrageous squalls; rain fell in torrents; and, to complete his misfortune, constant west winds opposed his doubling the Cape.

The 8th of June, the same bad weather still continued: the sailors, constantly enveloped in fogs, overcome with fatigue, and reduced to subsist on the most unwholesome food\*, loudly complained of so much adversity; and as it seemed impossible to contend with the violence of the winds from the south-west, Captain Hamelin held council with his officers: all agreed on the insufficiency of the provisions on board for a voyage of such bad omen, and which was likely to be of double the length computed. The Captain consequently resolved on tracing back his course, and tacked about for the north: at this time he was in latitude  $47^{\circ}$  S., exposed to all the rigours of a southern winter, which was now setting in; and the first symptoms of the scurvy already began to manifest themselves among his crew.

The 20th of June he made Maria Island; the 21st was abreast of Furneaux Islands; on the 23d the Ram's Head, on the east coast of New Holland, was distinguished. The sea now, which had been so rough and stormy, ceased to strain the ship; the fogs gradually dispersed; the temperature was milder, and every thing announced to our companions their estrangement from the stormy regions of the extremity of the eastern (southern) world. At length, on the evening of the 27th June, they had sight of Port Jackson, into which they entered the next morning; but owing to calms and baffling winds, they were unable, until the 3d of July, to reach the anchorage, where we had already been lying for several days. Thus were again united a second time, and by the merest chance, two vessels, which the constant perversity of the commodore in refusing to attend to the rendezvous appointed, had compelled twice to cruise by themselves, at those two epochs of our voyage when it would have been most advantageous for them to have acted in concert.

#### CHAP. XIX. — *Stay at Port Jackson.*

[From the 20th June to 18th November 1802.]

FROM what I have said in the foregoing chapters, the reader will premise that our arrival at Port Jackson could then be no subject of wonder; but how much reason had we for astonishment in beholding the flourishing state of this singular and distant colony. The beauty of the port was the admiration of every one. "From an entrance," says Commodore Phillips,—nor is there any exaggeration in this description,—"from an entrance not more than two miles broad, Port Jackson widens gradually into a great basin, with sufficient depth of water for the largest ships, and spacious enough to contain in perfect safety all that could ever be collected here: nay, a thousand sail of the line could manœuvre in it with greatest ease. It stretches inland about

\* How can this possibly be true; Captain Hamelin being now but three weeks out from Port Jackson, where "the whole resources of the government were open to him," and where he had laid in a stock of fresh provisions, to last him till his arrival at the Isle of France? &c.

thirteen miles in a western direction, and contains at least a hundred small creeks, formed by very narrow tongues of land, which furnish excellent shelter from all winds. For spaciousness and safety, Port Jackson is incontestably one of the finest ports in the world.

About the middle of this magnificent harbour, and on the shore of one of its principal coves on the southern side, rises the town of Sydney, the capital of the county of Cumberland, and all the English colonies in Australasia. Built on the slope of two neighbouring hills, and traversed lengthwise by a small rivulet, this rising town has a pleasing and picturesque appearance. To the right, and on the northern point of Sydney Cove, is seen the Signal Battery, built on a rock of difficult access; six pieces of cannon, protected by a trench of turf, cross the fire of another battery, which we shall presently describe, and thus defend, in the most efficacious manner, the approach to the town and its peculiar port. Beyond, the large buildings of the hospital present themselves, capable of containing two or three hundred sick: among these buildings, that especially is worthy of notice, of which all the pieces, fashioned in Europe, were brought in the vessels of Commodore Phillips, and which, a few days after his arrival, was in a state to receive all the sick he had on board. On this same side of the town, on the sea-shore, is a very handsome warehouse, close to which the largest vessels come to discharge their cargoes. In different private dock-yards, small craft, and brigs of various tonnage, are on the stocks, intended for the internal or exterior commerce of the colony: these vessels, of from 30 to 300 tons burthen, are exclusively constructed of country timber, their masts even being the produce of the Austral forests. It is noticed in Chap. XIV of this history, that the discovery of the strait, which separates New Holland from Diemen's Land, was effected by a simple whale-boat, commanded by M. Bass, surgeon of the ship *Reliance*. Consecrated, as I may say, by this grand discovery, this bold navigation, M. Bass's boat is preserved in this port with a kind of religious respect. Snuff-boxes made of its keel are relics, of which the possessors are as proud as they are careful, and the governor himself imagined he could not make a more respectful present to our chief than a piece of wood from this boat set in a large silver etui, round which were engraven the particulars of the discovery of Bass's Strait.

Vessels belonging to individuals unload at the dock, called the Hospital: beyond the hospital, and on a line with it, is the prison, in which are several cells capable of containing from 150 to 200 prisoners; it is surrounded by a lofty and strong wall, and protected night and day by a strong guard. At a little distance thence is the warehouse for wines, spirits, salt provisions, and other similar articles; fronting is the parade, where the garrison every morning muster to the sound of a numerous and well-appointed band belonging to the regiment of New South Wales. The whole of the western side of the square is occupied by the house of the lieutenant-governor, behind which is a vast garden, equally interesting to the philosopher and the naturalist, on account of the great number of useful vegetables transported thither from all quarters of the globe by its present respectable proprietor M. Paterson, member of the Royal Society of London, and a distinguished traveller. Between the house and the magazine of which I am speaking, is the public school: there, are instructed in the principles of religion, morality and virtue, those young girls, the hopes of the growing colony, whose parents, of nature too corrupt or too poor, could not themselves educate with sufficient care; there, under respectable tutoresses, they have at an early age inculcated into them to know, respect, and cherish the duties of a good mother. But let me not anticipate one of the most affecting pictures we have to present to our readers, but rather  
reserve

reserve the particulars of this venerable institution for the chapter in which I shall present, in an aggregate view, the fine system of colonization pursued on these shores. At the rear of the house of the lieutenant governor, in a very large warehouse, are deposited all the dry provisions and flour belonging to the government: it is a sort of public granary, especially designed for the maintenance of the troops, and those who receive their subsistence from the state. Along the whole extent of the principal square, called Sydney-square, are the barracks, in front of which are several pieces of field artillery: the buildings, containing the apartments of the officers, form the lateral parts of this square, and the powder-magazine is in the middle. Near this spot, in a small house belonging to an individual, the chief civil and military officers are accustomed to assemble; it is a kind of coffee-house maintained by general subscription, in which different games are played, especially billiards.

Behind the parade, which I have previously described, rises a large square tower, which serves as an observatory for such of the English officers as study astronomy: at the foot of this tower are laid the foundations of the church, of which it is intended for the belfry; but a structure of this description, exacting a large expence, many hands, and much time, the governors have hitherto neglected to prosecute it, preferring the formation of those establishments more immediately indispensable for the existence and prosperity of the colony. Till the church shall be completed, divine service is performed in one of the halls of the large wheat magazine belonging to government. Two handsome wind-mills on the summit of the western hill terminate on this side the series of the principal public buildings.

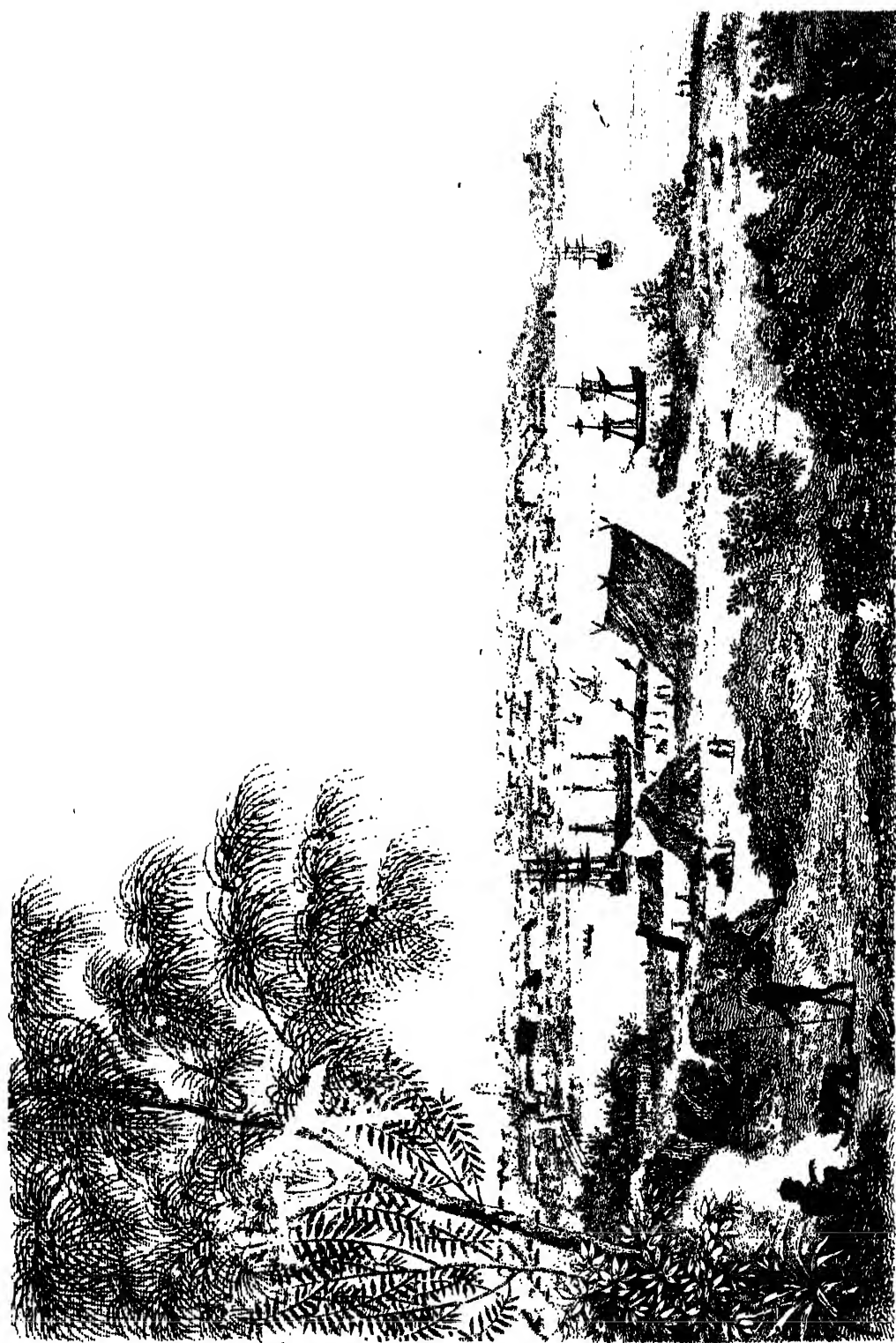
On the small rivulet that runs through the town, at the time we were there, was a wooden bridge, which, by means of a substantial causeway, occupied, as I may say, the bottom of the valley, through which the stream flows. We shall cross this bridge, in order to take a cursory view of the eastern portion of Sydney town.

At the eastern point of the cove is a second battery, the fire of which, as we have before observed, crosses that of the Signal battery. On the shore, proceeding towards the town, small salt-ponds are seen, at which some Americans, settled for this purpose at Port Jackson ever since 1795, manufacture by evaporation part of the salt employed in the colony. Beyond, and towards the bottom of the port, is the dock called Government Dock, on account of its being exclusively appropriated for the vessels of government. Between this dock and the salt-ponds, is the careening place for shipping. The wharf naturally slopes in such a manner that, without any labour or expence on the part of the English, the largest vessels can be laid up without danger.

Near the Government Dock, are three public magazines: in one are stowed all articles requisite for domestic use, such as potter's-ware, furniture, utensils of all kinds for the kitchen, &c. farming instruments, &c. &c. The number of articles is truly immense, and the mode of delivery is marked by wisdom and liberality. On these distant shores, in fact, European merchandize bears such an extravagant price, that it would have been next to impossible for the populace here to procure those articles indispensable for obtaining the first wants of life: the English government, to remedy this, delivers from its plentiful stock whatever is required, at stated prices, some even inferior to those given for the same articles in Europe. But, in order to prevent the

\* The wooden bridge has been removed since our leaving Sydney town to make room for a new stone bridge; at the same time a water-mill has been constructed within the spot by government, and strong sluices have been made, as well to keep back the fresh water, as to restrain the incursion of the tide which used to flow a considerable distance up the valley.





speculations of greedy men, and dilapidation, no one can receive any thing from these stores without an order specifying what is to be delivered to him. In a neighbouring store-house are kept different clothing, as well for the troops as convicts; here also is store of sail-cloth and cordage for the government ships. The last of the three edifices is a public work-house, where the female convicts and prisoners are kept at labour.

Behind these warehouses stands the governor's house, built in the Italian style, surrounded by a colonnade equally simple and elegant, and having in front a very beautiful plantation which slopes down to the sea-shore: already in this plantation are combined a great variety of trees; the pine of Norfolk Island, and the superb columbia, rise by the side of the bamboo of Asia; farther on, the orange of Portugal, and the fig of the Canaries, ripen beneath the shade of the apple-tree from the banks of the Seine; the cherry, peach, pear, and apricot, are confounded with the banksia, metrosideros, cornus, melaleucas, casuarinas, eucalypti, and a number of other indigenous trees. Beyond the government-garden, and on the back of a neighbouring hill, is the wind-mill, slaughter-house, and ovens, belonging to government; the last, especially, designed for baking of sea-biscuit, and capable of furnishing daily from 15 to 1800lb. Not far from a neighbouring cove, at a spot called by the natives Wallamoola, is the charming dwelling of the commissary-general of government, Mr. Palmer: the grounds are watered by a rivulet of fresh water, which falls into the extremity of a cove and forms a very safe and commodious port. Here it is that Mr. Palmer causes those small vessels to be built he employs in the whale and seal fishery off New Zealand, and in Bass's Strait. The neighbouring brick-ground, likewise, furnishes a considerable number of tiles, bricks, and square tiles for the public and private buildings of the colony.

At a little distance to the south of Sydney Town, on the left of the high road to Paramatta, are the remains of the first gallows raised in New Holland. Driven from its site, as I may say, by the spreading of the houses, this gallows has been replaced by another in the same direction, contiguous to the village of Brick Field. This village, composed of about two score houses, has several manufactories of tiles, pottery, Puenza ware, &c.; its position is pleasing, and the neighbouring lands less sterile than the vicinage of Sydney Cove, repay with greater interest the various culture introduced into these distant climates. The great road to Paramatta passes through the middle of Brick Field, which also is crossed by a small rivulet before its fall into the extremity of a neighbouring cove. Between this village and Sydney Town is the public burial ground, already remarkable for some very large tombs, executed in a style much superior to what could be expected from the state of the arts in the colony, and the recency of its foundation.

A variety of objects equally interesting at the same time \* presented themselves before us: in the port we saw several vessels recently arrived from different quarters of the world, the majority of them destined for new and hazardous voyages. Here, from the banks of the Thames or the Shannon, some about to proceed to the foggy shores of New Zealand, and others, after landing the freight consigned by the government of England for the colony, about to sail for the Yellow River of China; some laden with coal intended for the Cape of Good Hope and India; many of small & built ready to depart for Bass's Strait, to collect the furs and skins obtained there by men left on the different islands to take the amphibii who make them their resort: Other vessels again of greater burthen and strength, and well armed, were intended for the western shores of

\* We observed what is above related.

America, deeply laden with merchandize, for a contraband trade with the inhabitants of Peru. Here again one was equipping for the rich traffic in furs on the north-west coast of America; there all was bustle to fit out store-ships for the Navigators, Friendly, and Society Islands, to bring back to the colony the exquisite salt pork of those islands. At the same instant the intrepid M. Flinders, after effecting a junction with his consort the *Lady Nelson*, was preparing to resume his grand voyage round New Holland, a voyage afterwards terminated by the greatest disasters\*. Already the road to Port Jackson had become familiar to the Americans, and their flag was incessantly flying in this port throughout the whole course of our stay.

This assemblage of grand operations, this constant movement of the shipping, impressed on these shores a character of importance and activity which we were far from expecting in a country so lately known to Europe, and the interest it excited increased our admiration.

Nor less was the population of the colony a subject with us for wonder and meditation. Never perhaps was a more worthy subject presented for the study of the statesman or philosopher, never perhaps has the happy influence of social institutions been evinced in a more striking or honourable manner, than in these distant shores. Here those formidable pests, so long the terror of their country, are found collected together: outcasts from European society, banished to the extremity of the globe, and from the first instant of their exile placed between the certainty of punishment and the hope of a happier fate, constantly under a vigilance as inflexible as active, they have been fain to renounce their anti-social habitudes. The majority, after having expiated their crimes by a rigorous slavery, have entered again into the rank of citizens. Forced to become interested in the maintenance of order and justice, to maintain the property they have acquired; and become almost at the same instant husbands and fathers, they are bound to their present condition by the most powerful as by the dearest of ties.

Like is the revolution, produced by similar means, among the female sex; and the once wretched prostitute, brought by insensible degrees to a more regular mode of conduct, now becomes the mother of a family at once intelligent and inclined to toil.

\* Allusions to these before has been made, but the most terrible disaster, and that which stamps infamy on the Governor Du Caen and on the French government, who, years after application, refused an order for his release, was the imprisonment of Captain Flinders during six years and upwards at the Isle of France. What a contrast does this circumstance afford between the two governments! The French navigators were treated like brethren, and relieved from their distresses at Port Jackson: the hand of death was stopped by British interposition when upreared to strike its victims; and the renovated French, after experiencing "the most delicate and generous hospitality, were sent away amply stored for their voyage." Captain Flinders, the English navigator on a similar expedition, after one ship being condemned at Port Jackson, and the other lost at sea, made the Isle of France in a small vessel of 29 tons. The French navigators had arrived there before him; their reception by the English at Sydney Cove, and every where on the island and at sea, was known at the Isle of France; the French gentlemen on board the *Naturaliste* and the *Geographe*, (among which certainly was M. Peron,) had not been silent; they had extolled in even higher terms than they merited the kindness they had received, and warmly spoke of the civility, the intrepidity, and skill of Captain Flinders. Reader, in return for the hospitality of the English, though known in his real character to the governor, Captain Flinders was treated as a spy, shut up in a close room at Port Louis at a time the sun was vertical, and when fresh air was stated by the surgeon who attended him for the surgeon to be indispensable, for fifteen weeks; and, only at the intercession of the worthy Captain Bergeret, after that period, as a favour, was transferred to the prison where other officers were kept. Here he languished seventeen months longer, and when a cartel was established for an exchange of prisoners between this island and India, Captain Flinders was the only one excluded from its benefit. After this period, to save the trouble of a guard for only one prisoner, he was indeed allowed to live in the interior of the island, but continually experienced marks of the tyrannical caprice of the governor for four years and a half longer, in spite of all intercession for his release. Reader! the name of this savage governor was Du Caen. He is now our prisoner, and in himself has to experience the difference of the civilization and humanity of the two nations. Tr.



But not only in the moral character of these women do we notice this important change : their physical condition likewise undergoes a modification at once suited to enlighten the legislator and the naturalist, and which on this account merits further detail. It is known to every one that common prostitutes in large capitals very rarely have children : at Petersburg as at Madrid, at Paris as in London, pregnancy is almost a phenomenon among courtezans of this description, although, by any thing that can be gathered from them, no other reason is assigned but a want of aptitude for conception. The difficulty of experiments had hitherto left undecided how far this barrenness is to be attributed to the mode of life of these women, and whether it is liable to removal by reformation of conduct ; but both these problems have been resolved by the occurrences in this singular settlement. After one or two years' residence at Port Jackson most of the English prostitutes become remarkably prolific ; and what, in my opinion, evidently proves that this effect is less to be ascribed to the climate than a change of life in these women, is the circumstance that those whom the police suffer to continue their shameful courses, remain as in Europe constantly barren. We may hence therefore deduce this double axiom, of such importance in physiology, — that excess of venery impairs the organs of woman, and exhausts her sensibility to that degree as to render her incapable of conceiving ; and that, to restore to those organs their pristine functions, all that is required is abstinence from this destructive excess, and a substitution of that moderation which constitutes the real pleasure of enjoyment, as that alone can lengthen its duration.

While these different objects were the subject of deepest meditation with us, all the officers and citizens of the colony were assiduous in remedying our misfortunes, and in their efforts to make us forget them. Our numerous sick, admitted into the hospitals of government, were attended with nicest care by the English surgeons. M. Thomson, chief physician of the colony, himself prescribed for them, and was unremitting in his visits. Whatever the country afforded was placed at our disposal. The governor-general gave our commander an unlimited credit on the public treasury, and delivered to him printed bills on the government, with blanks, which he was at liberty to fill up with whatsoever sum he found necessary ; and these bills, without any other guarantee than the signature of the French commodore, were received by the citizens with a confidence highly honourable to the government of our country\*. Our salt provisions, our taffia, (bad rum) and biscuit, were expended ; in recruiting our stock of these important articles every facility was afforded, and oftentimes were the government's stores opened to us for obtaining such articles the merchants could not furnish. Thanks to assistance so ample, we were enabled to new clothe our crew, who were in want of every

\* Here is another mistake : though certainly in many respects a good naturalist, when he touches on things without his immediate province, M. Peron wades beyond his depth. Nothing less than a compliment to the French government was intended by the colonists who accepted these bills ; if they were government bills (*cedules royales*) which M. Baudin had given him by the governor, the bills had the government stamp, and were received because the receivers knew they would have value for them with the English government, unless they were forged. Now forgery in New South Wales is punished with death, if detected ; the vigilance of the police insures detection, as is before observed ; and the gallows, as likewise is noticed by M. Peron, is at hand. Separate from these considerations, the colonists could not imagine other than that the French commodore had had these bills given him by the governor as the representative of government ; and they consequently looked to him for payment, without in the slightest degree regarding in the transaction that French government, in which, according to M. Peron, the acceptance in payment of these bills was "une confiance bien honorable." Tr.

thing ; to repair our two ships ; to buy a third ; and finally to resume the continuation of our voyage.

In the mean time our scientific researches met with every encouragement. An English guard was mounted to protect our observatory, placed on the north point of the eastern side of Sydney Cove. The whole country was open to the incursions of the naturalists. Though so rarely permitted, even to the inhabitants of these regions, we, as well as our people, were allowed to carry our fuzils ; guides and interpreters were appointed to attend us in our longer incursions : in short, the procedure of the English government here, with respect to us, was so noble, so generous, that to fail in the acknowledgment of our gratitude on this occasion would prove us void of every principle of honour and justice\*.

Imitating those in power, all the colonists treated us with the most delicate kindness. Each of them, no doubt mindful of the noble procedure of France with respect to the vessels of Cook† and Vancouver‡, seemed emulous of acquitting himself a part of the honourable debt of the English nation towards our own. Oftentimes did they repeat with complacency that excellent maxim, which France first inscribed on the code of European nations : “ *Causa scientiarum, causa populorum.*”§

In the mean time the main object of our stay at Port Jackson was prosecuted by all with equal ardour. While the sailors were repairing the damages sustained by our vessels, and collecting stores for the voyage, the naturalists extended their researches to every portion of the physical history of this interesting country. The scurvy, which had stiffened my swollen joints, already began to give way to the genial influence of good nourishment and of the climate : I directed my first steps towards Botany Bay, the mouth of which is some leagues to the south of Port Jackson. A broad and commodious road runs from Sydney Town to this bay : all the intermediate country is arid, sandy, apparently unadapted to any species of culture, and consequently is destitute of any European dwellings. The ground, after rising into the lofty hill, at the foot of which is Mr. Palmer's seat, slopes into a sandy plain extending to the marshy banks of Cook's River. Different species of *hakea*, *stypelia*, *eucalyptus*, *bankia*, *embothrium*, and *casuarina*, spring up among the sands ; and large plots are exclusively covered with the *xanthorrhea*, whose gigantic ears sprout at the height of six to seven meters|| from the

\* No author, whose work has passed through the Imperial press, has presumed, with the exception of M. Peron, however it may have been deserved, to speak thus highly of any thing English. M. Peron died shortly after the publication of this first volume ; and the second, though printed three years back, has not yet been published. Tr.

† To the honour of the court of France, on occasion of the 3d voyage of Captain Cook, then on his return home, the following rescript, dated 19th March 1779, was sent by M. Sarine, at that time secretary of marine, to all commanders of French ships : “ Captain Cook, who sailed from Plymouth in July 1776, on board the *Resolution*, in company with the *Discovery*, Captain Clarke, in order to investigate the coasts, islands, and seas of Japan and California, being on the point of returning to Europe, and researches of similar nature being of universal utility ; it is the King's pleasure that Captain Cook shall be treated as a commander of a friendly power ; and that all captains of armed vessels, &c. who may meet that celebrated navigator, shall make him acquainted with these orders of the King ; but at the same time admonish him that he must refrain from all hostilities.” Tr.

‡ At a time when every principle of justice was disregarded in France, the National Convention enacted a law, ordaining respect to be shewn to the vessels of Vancouver, and that they should have all assistance rendered them they might need.—M. PERON. Thus even the National Convention, when every principle of justice was disregarded in France, respected more the laws of nations and humanity than has done the present sovereign in the instance of Captain Flinders before noticed. Tr.

§ The cause of science is the people's cause.

|| 15½ to 23 English feet.

ground.

ground. In the distance rises the smoke of different fires ; they are those of the unfortunate hordes who dwell on these gloomy shores.

On approaching Botany Bay the ground gradually declines, and sinks at length into dangerous marshes, formed by the salt water of Cook River northward, and that of the river St. George towards the south. These marshes are of such vast extent and sometimes so deep, as in different parts to be impassable towards the sea. On the margin of them, and along the banks of both the rivers mentioned, vegetation is exceedingly flourishing ; thousands of trees of different kinds, and numerous shrubs crowded together, have an enchanting appearance, and present such a shew of fertility, that Captain Cook and his illustrious companions themselves were deceived by it. Much, indeed, is wanting in this celebrated bay to justify those hopes conceived of it from their brilliant description. Choked by large sand-banks, and open to the east and south winds, it is not itself safe on all occasions ; while the marshy quality of the neighbourhood renders it at once insalubrious and unfit for general cultivation. Hence Commodore Phillips, after surveying Port Jackson, speedily abandoned Botany Bay ; and from that time no other establishment has been preserved there than a kiln for burning lime, which is supplied by shells found on this coast in great abundance. Botany Bay and its vicinage are known to the aborigines by the name of Gwea, and to this part belongs the tribe of savages called Gwea-Gal, who acknowledge for their chief Ben-nil-long, an individual the interesting history of whom will be given elsewhere.

About twenty-five miles west of Sydney Cove is the town of Rose Hill, or Paramatta ; this I early visited, accompanied by the chief physician of the Naturalists, M. Bellefin ; a serjeant of the regiment of New South Wales served us for a guide, and by order of Colonel Paterfon was directed to procure us the means of extending our researches as far as possible. A high road leads from Sydney Town to Paramatta : without being paved it is handsome, and well kept, and in almost every part is wide enough to admit three carriages abreast : bridges have been thrown over those spots necessary, and the progress of the traveller meets with no impediment. Cut through the middle of those vast forests so long respected by the axe, this high road presents to view an immense avenue of trees and verdure. Beneath these tufty shades a grateful coolness reigns perpetually ; and their silent quietude is alone disturbed by the cries and frolics of shining parroquets, and the other airy inhabitants of the forest.

The country to Rose Hill is almost generally flat, being chequered only by a few gentle risings. Proportionally to the distance from the sea it becomes less sterile, and the vegetable reign presents more varied produce. In some places there are larger intervals between the trees ; here a very slender and odoriferous herbage carpets the surface with verdure : amid these pastures it is those numerous flocks of sheep are reared we shall notice in another part. The mild temperature of these climates, and the peculiar and pleasing fragrance of the chief part of their food, have proved so congenial to these valuable animals, that the finest races of Spain and England alike succeed ; nor have they to dread the ravage of the wolf, for neither wolves nor any obnoxious animal whatever exist in the country to molest them. Already, as is said, does the wool of these antarctic flocks exceed the rich fleece of the Asturias, and the English manufacturers pay for it a higher price than for Spanish wool. In the general picture of the colonies of the English in Australasia I shall dwell more at length on this article ; one which promises to Great Britain a new branch of commerce at once easy of practice and lucrative.

On the way, at intervals, the forest opens, and lands of various extent, redeemed from shades, are seen brought into culture ; the traveller distinguishes comfortable dwellings,

dwellings, shielded by umbrageous and elegant trees : he contemplates with much emotion these new fields, on which the slender gramina of the north rise on the wreck of the mighty eucalyptus ; and sees delighted so far from their native plains the most useful animals of his cherished home. • Here the large dew-lapped bull bounds with a vigour exceeding even that of its famous Irish fire ; the cow, more fecund in these less chilly climes, yields milk in larger portions than what she does in ours ; the English horse here shews an equal strength and equal spirit with that on the banks of the Thames ; while the hog of Europe is improved by numerous crosses with that of the South Seas, which surpasses it in shape, in lard, and flesh. Neither have all kinds of poultry succeeded less than larger animals, the farm-yards swarming with numerous varieties of turkies, geese, fowl, ducks, pheasants, &c., many of which are preferable to the finest in Europe.

Still more is the traveller interested on visiting the interior of the houses. Beneath these rural sheds, in the midst of deepest forests, dwell now in peace those men whose lawless life was formerly the dread of Europe, men familiarized with and living but by crimes, to whose atrocities there seemed to be no end but that which punishment and death should put : here dwelt swindlers, thieves, and knaves of all description ; worthless vermin which seem to multiply the more, the more society improves : all these wretches, the refuse and dishonour of their country, by the most inconceivable of metamorphoses, become laborious husbandmen, and peaceful and happy subjects. In fact, murder or robbery are things unheard of in the colony, where in these respects the most perfect safety reigns. Happy effect of the laws, equally rigid and beneficent, by which it is governed, and to which we shall have occasion to revert in another portion of the work.

The more at our ease to enjoy this interesting scene, M. Bellefin and myself frequently entered their rural abodes. Every where we met with the most obliging welcome ; and as we noticed the tender care of the mothers for their children, and considered that, but a few years before these same women, void of every tender and delicate feeling, were nothing but abandoned prostitutes, this unusual revolution in their moral conduct gave origin to reflections of the most gentle and philanthropic nature.

At length we came within sight of Paramatta, situated in the middle of a pleasant plain, on a cognominal river which admits the navigation of boats thus high. This town, of less extent than Sydney Town, consists of 180 houses, which form a very large street parallel with the river, and cut at right angles by an inferior one, terminated at one end by a stone bridge and at the other by the church. This last edifice, the structure of which is mean and heavy, was not yet completed when we visited the town ; and the progress towards its completion is slow, as the governors of the colony, with reason, consider other necessary works of greater importance ; hospitals, for example, prisons, work-houses, clearing of land, the fishery, ship-building, &c. on which in preference the convicts and the funds of the colony are chiefly employed.

At one of the extremities of the great street of Paramatta are barracks, capable of receiving from 250 to 300 infantry ; they are built of brick in shape of a horse-shoe, and embrace a large space, kept in excellent order and well covered with sand, where the troops parade. The force at this time at Paramatta consisted of 120 men of the regiment of New South Wales, under the command of Captain Piper.

The entire population of Paramatta, comprehending the garrison and inhabitants of the neighbouring farms, almost the whole of whom are addicted to agriculture, tending cattle, and a few mechanical employments, may be computed at from 1400 to 1500\*.

\* In 1796 the population of Paramatta was 975 ; and at that time the town had not been founded above eight years.

Here is a well appointed hospital, of which M. D'Arcy Wentworth is chief physician, a tolerably strong prison, a work-house for female convicts, a public school for girls, &c. This town is moreover the residence of a justice of the peace for the county of Cumberland, and is intended to be the principal seat of the civil administration of the colony, Sydney continuing to be that for what may relate to navigation, commerce, and war.

Towards the western extremity of the main street of Paramatta is Rose Hill, whence the town first received its name ; but that of Paramatta given by the natives to this part of the country generally prevails, even among the English themselves. The whole eastern part of Rose Hill presents an extremely gentle slope towards the town, on which is the garden of government. There interesting experiments for the naturalization of exotics are pursued with ardour ; and there are collected the most remarkable indigenous plants, intended to enrich the royal gardens at Kew ; thence also have been imported into England those which it has latterly acquired, and which have proved such valuable acquisitions to the botanical works of that country. A well-informed botanist, M. Cayley, sent from Europe, has the superintendence of the garden ; and the learned Colonel Paterfon, to whom New South Wales is indebted for this establishment, has constantly taken great interest in its improvement.

The side of Rose Hill opposite to Paramatta is steep, and forms a large crescent, which at first sight might be taken for the effect of human labour. At the foot of this singular hill runs a stream, of little consequence in general, but which, at the period of inundations, so frequent and so terrible in these climates, is swollen so as greatly to damage the neighbouring plantations.

On the summit of Rose Hill stands the government-house of Paramatta\* ; it is simple, elegant, and well planned, but receives its chief recommendation from its site, which commands the town, its meadows, the neighbouring woods, and the river. This house is commonly uninhabited ; but its apartments and furniture are so contrived that as often as the governor and lieutenant-governor came to Paramatta they can be commodiously accommodated, as well as their families and suites.

To add an additional charm to such a beautiful site, the English governors planted here the first vineyards formed in the colony : if the vine had succeeded on the back of the crescent which I have noticed, the government-house would then have been surrounded on this point by a rich amphitheatre of clusters of grape and verdure ; but experience unfortunately has proved that the site was the least adapted of any that could have been chosen for this species of culture, for a portion of the hill is exposed to the north-west winds, the most dreaded of any in this part of New Holland.

Hence, notwithstanding the promise of success held forth for plantations of this description by the temperature of the climate and nature of the soil, the result of the experiments, made at considerable cost, have hitherto been of a very discouraging nature.

In vain have the best plants of the Cape of Good Hope, of the Canaries, Madeira, Xeres, and Bourdeaux, been introduced here ; in vain the most intelligent vine-dressers of Europe been employed ; the activity and intelligence of these men have been rendered abortive by the terrible N. W. winds. On a second trip to Paramatta, in company with Colonel Paterfon, I had frequent opportunities of interrogating the vine-dressers, two of whom were from Bourdeaux ; all of them agreed that the climate and soil perfectly suited the vine, but, in their opinion, as long as the government persisted in continuing the plantation at Rose Hill, it was impossible they should succeed. " In no part of the world," observed they, " does the vine shoot forth in greater strength and vigour than

\* This house is called the Crescent, from the singular form of the hill on which it stands.

here. Every thing for the space of two or three months combines to promise the most bountiful vintage; but soon as the slightest breeze from the N. W. is felt, all hope is destroyed; buds, flowers, and leaves alike become the victims of its fiery breath, and wither and die away."

Taught by experience and the remonstrance of these vine-dressers, Governor King has at length resolved to transport the vines to a part of the country selected by these men, which seems likely to answer the most sanguine expectations.

Whatever be the result of this new attempt, we may be fully assured that the English government will not abandon the prosecution of the culture of the vine; a culture which soon would be productive of the greatest advantage, until every likelihood of success shall have vanished. In fact, by one of those chances difficult to comprehend, Great Britain is the only one of the dominant maritime powers which does not produce wine, either on its immediate territory or in its colonies, although the consumption of this article, on board its fleets and throughout the immense regions subject to its empire, is immense. Obligated to import enormous quantities of this beverage from Portugal, [Sicily] and France, she sees with regret a considerable portion of her capital annually absorbed by purchases of this article, and is anxiously solicitous of the means of freeing herself from this onerous tribute\*. It was chiefly with this view, as we have in a former part of the work observed, that she attempted during the last war the conquest of the Canary islands; this also was one of her motives for twice attacking the Cape of Good Hope. What she was unable to obtain, or what she assuredly will only have temporarily obtained by force of arms, she endeavours and hopes to effect by means of her colonies in Australasia; and, notwithstanding the obstacles I have recounted there can be no doubt but ultimately she will effect her purpose. But, without dwelling longer on this point, let us return to the destructive winds of the north-west, which present one of those numerous phenomena peculiar to New Holland; the explanation or even the existence of which seems, at variance with the least disputed principles of the general physics of great continents and their meteorological history.

The county of Cumberland, which comprehends all the present establishments of Great Britain in New South Wales, is bounded on the east by the wide Austral Ocean; on the north by Broken Bay and the river Hawkesbury, of which we shall shortly speak; on the west by a chain of mountains which, bending above Broken Bay and below Botany Bay, surrounds in shape of a crescent the whole county. These

\* This assertion is not proved by the measures of the ministry; and it is even questionable whether any financial regulations, the only ones that could in the present state of affairs be adopted, would be effectual to alienate the national taste for the accustomed wines, and most especially for that very insipid wine Red Port: an experiment might yet be made; the Cape of Good Hope belongs to us, and lands, which might be cultivated to any extent, adapted to the culture of the vine. The plants indeed transported to the Cape have in almost every instance changed their quality, but in some for the better, especially the Madeira grape. Cape Madeira, if it were generally known, and if the duty should be reduced (as it is the production of a colony of our own) to the same proportion with respect to Portugal wine as the duty of rum bears to that of brandy, that is to say, to two-thirds of the duty on Portugal wine, would be preferred to all other wines, port excepted, and might even compete for sale with that. It is equally strong with Madeira, pleasant to the taste, and possesses a briskness analogous to Champagne. While five millions annually, on the average of many of the years last past, are paid by this country for the balance of its imports of grain and corn alone, it certainly behoves the ministry to lessen as much as possible the further exit from the country of specie, especially when its scarcity is considered; and what mode would be more secure of this end, and at the same time of calling back the immense sums lately sent to Portugal and Spain, than rendering unnecessary the import of wines from these countries, or at least lessening the quantity imported from them, a quantity amounting annually to from 30 to 36,000 tons, and at the present extravagant prices drawing from the nation, from 12 to 1500,000 pounds; this also, exclusive of wines carried by American and British ships to our foreign possessions in the East and West, from France, Portugal, Madeira and Spain. Tr.



mountains are only a slender portion of the great chain which from the most northern cape of New Holland advances along the eastern coast of the continent to its southern extremity, and is joined by the groupes of Kents and Furneaux islands, with the frowning mountains of Diemen's Land, which appear to be at once a prolongation of the former and their conclusion.

With a general direction, like the Cordelleras, from north to south, these mountains of New Holland have a singular resemblance in disposition to the Andes of South America. No one, indeed, is ignorant that this mighty chain approaches so near to the western shores of South America that it leaves but a very narrow plain between its flanks and the sea, while eastward of this chain spread immense vallies, in midst of which roll the amazing volumes of water that form the Plate, the Orinooko, and the Amazon rivers.

In New Holland nature has followed a similar but inverted plan to that in South America. On the eastern coast here is found the chain of mountains of which we are speaking: not only are very few traces of them perceptible on the western shores, but all that has been seen of this last part seems to announce that, in this direction, plains exist analogous to those of Guinea, Brazil, and Paraguay. Unfortunately, between these plains and those of South America the difference is extreme: the former every where covered with a rich and deep bed of vegetable earth, watered in all directions by large streams and innumerable rivers, exhibit the pleasing picture of unbounded fertility; while the dismal shores on the west of New Holland, covered with an arid sand, destitute of any river, and possessing merely some few streams of fresh water, seem devoted by nature to the most frightful barrenness. It is, however, sufficient I should have pointed out these grand phenomena in the physical constitution of the continent of which I treat; phenomena on which elsewhere I shall more amply dwell: to the mountains of Cumberland, previously, it is fit I should revert.

These, although designated officially by the names Carmarthen and Lansdowne, are so generally known by the title of the Blue Mountains by the English colonists, and by those authors who have treated of them hitherto, that it seems to me indispensable to mention them under this denomination.

In clear weather these mountains are readily distinguished from the upper part of Sydney Town, that is to say, the distance of fifty miles: they here present the appearance of a blueish curtain, raised but in a small degree above the horizon, and the uniformity of which scarcely admits suspicion of their consisting of different tiers. Seen from the heights of Castle Hill, that is to say, five-and-twenty miles away, their summits appear less regular: at intervals some bold peaks are perceived, and the different tiers appear like so many lines, rising in height as they advance deeper into the country, and the dull colour of which seems to indicate their being arid and bare.

Viewed from the vicinage of the Hawkesbury, at the distance of but eight or ten miles, "they resemble," says M. Bailly, "a vast curtain, which limits the horizon on the north-west: no break, no peak, varies the outline; an horizontal line, above which is distinguished another regular tier of mountains of a browner shade, depicts the melancholy aspect of these mountains." On advancing to the foot of these same mountains, M. Bailly observed the same uniformity in their length, the same continuity in their summits; the only break they present, in fact, in this part, is that from which the river Grose precipitates; a river the source of which, as yet unknown, appears to be at distance in the interior of the mountains, and which, by its junction with the river Nepean, constitutes the famous Hawkesbury River, of which we shall have to say so much in the course of this history.



The height of the first tier of the Blue Mountains exceeds not from to 600 meters\*; their structure consists exclusively of the same kind of quartz free-stone which forms the base of the neighbourhood of Sydney Town, of the hills on which it is situate, and of the whole extent of country which from the sea-shore spreads to the foot of the mountains. Wherever the English have penetrated, they have found nothing but this free-stone; and, notwithstanding they have advanced in a direct line forty miles into the mountains, they have never yet discovered any kind of primitive rock. We shall, however, see in a little time that, from collections made by M. Depuch and Bailly, in the deep bed of the river Hawkesbury, there can remain no doubt of the Blue Mountains being fundamentally of primitive and granitic origin: but the numerous obstacles we shall have to recount have hitherto prevented Europeans from reaching the granitic plateaux of the interior.

The apparently slight elevation of the Blue Mountains, and their uniformity, not allowing the English at first to suspect the difficulty of exploring them, they were satisfied, in the infancy of the colony, with sending a few men to scale their summits. At the same epoch, several convicts, seeking to free themselves from slavery, endeavoured to pass this formidable barrier: some of these died in the undertaking, and the others were constrained to abandon this scheme of enfranchisement.

It was not until the month of December 1789, that the government itself resolved on attempting their exploration. With this view, Lieutenant Dawes was dispatched with a considerable detachment of troops, and a stock of provisions for ten days; but after much fatigue and many hazards, he returned to Port Jackson, without having been able to penetrate more than nine miles into the interior of the mountains. According to his account, his progress was stopped by impassable ravines and chains of very lofty rocks, exceedingly steep and precipitous.

Eight months after the expedition of Lieutenant Dawes, that is to say, in the month of August 1790, Captain Tench himself set out with a very strong escort of soldiers, and all the articles requisite for renewing the attempt of passing these mountains; but Captain Tench was not more fortunate than his predecessor.

Discouraged by the want of success, the English government suffered three years to elapse without making any new attempt; and if some few expeditions, equally fruitless, made for the purpose by individuals, be excepted, nothing was effected in the interval towards the discovery of the western country. The celebrated M. Paterfon at length recalled the attention of government to the Blue Mountains, and he himself, in September 1793, was charged with the new expedition, to render which successful nothing was neglected. The plan of M. Paterfon was, after reconnoitring the mouth of Broken Bay, to ascend the river Hawkesbury as high as it is navigable, and thus at once reach the foot of the mountains. To facilitate the navigation of the river, two extremely light boats were constructed, on board of which was embarked a plentiful store of provisions, ammunition, ladders of cord, grapples, cordage, &c. A strong escort of soldiers accompanied the colonel; several of the most intrepid highlanders of Scotland were of the party; and some of the natives of Port Jackson were to serve as guides: finally, M. Paterfon himself was habituated from earliest infancy to climbing the steepest mountains of Scotland, where he was born, and had become familiarized, by his long travels in the midst of Africa, with all the incidental privations of a similar excursion: thus, as is premised, nothing which could ensure the effectuation of the object of the

enterprize was omitted. Still the obstacles and difficulties met with rendered null all the preparations made, and M. Paterfon was not more fortunate than the previous adventurers. After discovering the river Grose, which falls into the Hawkesbury above Richmond-Hill, he advanced farther into the country the space of about 10 miles, ascending several cataracts, one of which ran at the rate of from 10 to 12 miles in the hour. Shortly after, navigation became impracticable; one of the two boats sunk, and the other grounded on some trunks of trees which obstructed the course of the river. In vain did the party continue to advance; the number of the cataracts encreased, one of them falling from a perpendicular height of 130 meters\*; frightful precipices surrounded them on all sides; one ridge of mountains surmounted served but to shew others, still increasing in aridity, and in difficulty to scale: at length it became necessary to return. In front of the spot which the party reached was a very large peak, denominated Harrington Peak by Colonel Paterfon. On this excursion it was that the colonists had their first communication with the Bâ-dia-Gal, a singular people, who live in the vicinage of the Hawkesbury River, and who differ from the natives of Port Jackson and those of Botany Bay in manners, language, mode of life, and above all, in a singularly remarkable characteristic of their physical conformation: all the individuals of this race have their arms and thighs disproportionately long with respect to the rest of the body. But as observations of this kind will with more propriety be presented in a different part of this work, among others, I shall continue the history of these singular mountains.

A year had not yet elapsed before other adventurers scaled these mountains†. The individual who attempted the desperate undertaking of passing them, was the quartermaster of the Sirius, one Hacking, an intrepid and spirited man, who was accompanied by others of equally determined character. Ten days were employed by this party in seeking a pass; their efforts were not altogether mispent: they penetrated about 20 miles farther than those by whom they had been preceded, but ultimately were forced to return. Beyond the different peaks discovered by Hacking, the mountains presented still additional tiers, which he deemed even more difficult to surmount than those he had passed; from north to south they formed an immense bulwark, and were frightfully arid. The interior peaks consisted of a reddish freestone of ferruginous nature. Among these mountains but one savage was distinguished, who, at the sight of the English, fled with precipitation: the only species of quadruped seen was a sort of red kangaroo, hitherto unknown to naturalists, and which will doubtless form one of the most curious species of this genus of animals, so remarkable in its form and habitudes.

Among the most interesting characters of this Austral colony must be placed M. Bais, surgeon of the Reliance, who, in a slight whale-boat, dared to venture on an unknown sea, and discovered the famous strait to which his name was affixed by public gratitude. This extraordinary personage was also solicitous of attempting to pass the Blue Mountains; and in the month of June 1796 set off for the purpose, accompanied by a small number of men, on whose courage and skill he could depend. Never in an attempt of this kind was greater hardihood displayed. With his feet and hands armed with iron hooks, M. Bais several times climbed the most steep and horrible mountains. Repeatedly stopped by precipices, he caused himself to be let down them with cords. Great as this zeal, it was of no consequence; and after fifteen days of fatigue and unparalleled danger, M. Bais returned to Sydney, confirming, further by his inefficiency

\* 426 English feet.

† In August 1794.

the impracticability of penetrating beyond these singular mountains. From the summit of a very elevated peak, which he ascended, M. Bais discovered before him, at the distance of 40 or 50 miles, another chain of mountains of a superior elevation to any of those he had hitherto passed, and the intermediate space presented obstacles and dangers equally great with those in his rear. In this perilous excursion the party suffered exceedingly from thirst, their provision of water being expended, and no means of recruiting it being found in these arid mountains. "When," said M. Bais to me, "we by chance discovered any moist earth or mud in the crevices of rocks, we applied our handkerchiefs to the surface, and sucked as forcibly as possible, in order to imbibe the remaining moisture."

Such, to the period of our arrival at Port Jackson, had been the result of the different efforts to pass the Blue Mountains. Tired of the expence and fruitlessness of the enterprize, the English government for some years ceased to regard it as a matter of any consequence. My companions and myself, however, succeeded in persuading Governor King, towards the close of our stay, that is to say, in October 1802, to issue orders for a renewal of the undertaking. The direction of the expedition was confided to M. Barceillier, a French emigrant, an engineer belonging to the colony, and aide-de-camp to the governor. I was myself anxious to accompany this party, but M. King did not conceive himself justified in extending his complaisance so far as to grant me permission. To the different precautions used on anterior expeditions, was superadded the ingenious plan of stationing small posts at various intervals, increasing in number in proportion to the advance into the interior of the mountains, and thus forming an active chain of communication between the advancing party and the nearest English establishment. The same fate which attended the others awaited the attempt of M. Barceillier; it does not even appear that he was able to penetrate so far as some of his predecessors. From this wearisome excursion he brought back only a small number of specimens of freestone, similar to that of the sea-shore, and of the intervening space between it and the mountains.

What is more singular in the history of these mountains, the natives of this country know as little of them as the Europeans. All agree in the impossibility of clearing this western barrier; and what they relate of the country beyond proves it to be utterly unknown to them. There, say they, is an immense lake, on the banks of which are inhabitants fair as the English, dressed like them, and like them building stone houses and large towns. We shall see in another part of this work that the existence of this large lake, this sort of Caspian sea, is not less destitute of probability than the tale of the white inhabitants and their civilized condition; I shall merely remark, that it is very probable these ideas are of no older date than the settlement of the English colony, which appears to have inspired them\*.

\* Besides the different attempts noticed by M. Peron to pass the Blue Mountains, one was made in January and February 1799, by a convict of the name of Willson, a man accustomed to a savage life from having long resided with, and followed the manners of the natives; he was attended by a freed man belonging to the governor. Fifty miles south-west-half south of Paramatta, Willson discovered abundance of rock salt; at eighty miles south-west, saw a fine country and a mine of coal, with abundance of limestone; when one hundred miles south-west quarter-west, the land was intersected by creeks, which appeared to receive rivers: north of this last station the country was open and thinly wooded; north-west it was mountainous, but with much good land; at one hundred and thirty miles south-west-by-west of Paramatta he fell in with the head of a river nearly as large as the Hawkebury, appearing to run from south-east to north-west. Now should this river continue the course here described, and pass to the west of the mountains by some undiscovered fissure, it must either empty itself into a lake, or become absorbed. The truth of the remainder of Willson's relation was not disputed by Governor Hunter, after having dispatched people to verify the existence of the rock of salt described by him, who found it at the stated place. Ta.

However,

However, the savages on these shores have a sort of religious veneration for the Blue Mountains. Here, in their opinion, an evil spirit or malignant divinity resides, of which elsewhere we shall present several grotesque figures traced by the natives themselves. From the summit, of these insurmountable rocks, this terrible god hurls his thunder, and sends forth the burning winds and floods which alternately lay waste the country. However ridiculous such belief, it yet has its origin in observations of the phenomena of nature; for, from the summit, of these mountains it is that all the scourges noticed here descend. In this point of view, the majority of the religious opinions of different nations are equally worthy of the attention of the naturalist and the philosopher: in another place we shall produce additional interesting proofs of this useful truth.

The rapid sketch of the general history of the mountains of the county of Cumberland, into which I have digressed, was indispensable, in order that a just idea might be formed of the extraordinary phenomena attendant on the winds from the north-west; phenomena which, if their origin be regarded, are not only extraordinary but even incomprehensible.

We have noticed before that the whole of the western and north-western parts of this portion of New Holland are covered with a very broad chain of mountains\*, the height of which apparently must be equal to that of most of the lofty chains hitherto known. Who, allowing this circumstance, and from the breadth of these mountains, but must conclude that the winds by which they are traversed should generally be of a cold temperature? This is a consequence so natural, so conformable to all the principles of physics, general or particular; a consequence so clearly deduced from the long and continuous attention paid to meteorological phenomena, that it seems irrefragable; still, in the instance in question, the exception to this consequence is indisputable and positive: as if the atmosphere of New Holland, as well as the animals and vegetables of this singular continent, was subject to distinct laws, and alien to our principles of science, to all the rules of our systems, and to all the analogy of our ideas!

Far from possessing that cold of less or greater intensity, which they should deduce from the immense mountains they traverse, the north and north-west winds are fiery blasts unsurpassed by the most terrible of this description experienced in Africa. Their parching breath carries destruction whithersoever it penetrates; the liveliest vegetation, fountains, and streams, are withered and annihilated, while animals perish by myriads, the victims of its fatal influence. As, however, in this country of wonders effects cease to correspond with causes, to experience alone can appeal be made for their existence; now, congruous as it is with the unanimous testimony of the inhabitants of New South Wales, the statement made here is supported by the authority of the most valuable historian this country can hitherto boast.

(February 1791.) "At this epoch," says Collins, "the greater part of the torrents and streams were dried up; and they were obliged to dig pits in the bed of Sydney River to furnish water for the supply of the town. The 10th and 11th of this month so great was the heat at Sydney Town, that Fahrenheit's thermometer stood at 150° in the shade. At Rose Hill, thousands of large bats perished in consequence. In parts of the port the ground was covered with different species of birds, some already suffocated with the intensity of the heat, and the residue on the point of expiring; many, while flying, were struck dead and fell to the ground. The springs not yet entirely dried up were so much tainted by the vast number of the birds and bats which,

\* What we shall shortly observe respecting the prodigious swell which the small rivers of the country experience, will more and more clearly prove how very broad the Blue Mountains must necessarily be.  
having

having fought them to quench their thirst, had expired on the sides of them, that the water for many days was infected. The wind then blew from the north-west, and did much injury to the gardens, consuming all exposed to its breath. Those individuals whom necessity obliged to go without doors, declared that it was impossible to front the point whence the wind proceeded for the space of five minutes together.

(November 1791.) "The extreme heat during this month occasioned many individuals to fall sick. On the 4th, a convict waiting for Mr. White in the passage leading from his house to the kitchen, was struck by the sun, and, instantly deprived of motion and speech, expired in the space of four-and-twenty hours. The thermometer this day at noon stood at  $95^{\circ}$ , and the wind blew from the north-west. The country, as if to add to the consuming heat of the atmosphere, was every where on fire. At Sydney, the grass and bushes behind the hill west of the creek, caught fire, or possibly might have been set fire to by the natives; the conflagration, excited by the south-west wind which blew violently, spread with great rapidity, and devoured all it reached with incredible fury. One house was already burnt, and all the summit of the hill being covered with flames, the town was menaced with complete destruction, when fortunately the united efforts of the garrison and inhabitants stopped its progress. The general alarm occasioned every individual to leave his house: the heat was so intense that the people could scarcely breathe; almost all the pot-herbs were reduced to powder, and the thermometer of Fahrenheit stood at  $100^{\circ}$  in the shade. At Paramatta and at Tongabbee the heat was equally extreme; the whole country was in flames, and some dwellings caught fire and were burnt. During this alarming day, it thundered repeatedly in the distance, and towards evening a quantity of rain fell, which somewhat refreshed the atmosphere.

"The effect of this formidable wind was felt as far as the island Maria, more than 250 leagues from Port Jackson; for, at the same time the English colony was thus endamaged, the American ship, Hope, experienced in the vicinage of that island a horrible tempest, occasioned by this same wind. The weather was cloudy, oppressive, and very hot, and the atmosphere seemed loaded with thick smoke.

(August 1794.) "The scorching land-wind visited us on the 25th of this month for the first time this season, blowing violently till night; it was then succeeded, as is usual after such hot days, by a wind from the south."

From the facts I have thus exhibited, the number of which it would be so easy to multiply from the remarks of Philipps, Hunter, Watts, Tench, King, &c. we may therefore deduce the following consequence:

"The winds which traverse New Holland from north-west to south-east, in the county of Cumberland, have the double characteristic of great dryness and extreme heat, notwithstanding the extent and height of the mountains over which they must pass before their arrival at this last point."

We have previously noticed that, off the coast of Leuwin's Land, the wind blowing from east to west presented similar properties: we have further remarked that, at the southern extremity of Diemen's Land, the same phenomena accompany the north wind, which however could not here be felt without traversing the lofty mountains of Wilson's Promontory, those of the Furneaux Islands, Bass's Strait, and the lofty summits of Diemen's Land, which should be eternally covered with ice and snow. We therefore, from the sum of these observations, are led to this second deduction, more comprehensive than the preceding:

"That the winds passing over New Holland from north to south, from east to west, and from the north-west to the south-east, are dry and scorching winds."

These

These results, with others analogous, will be seen in another part applied to the solution of the great problem respecting the physical state of the interior of New Holland. We shall now resume the description of the territory of Paramatta.

I have already noticed that the distance of the trees from each other in the forests contiguous to this town, and the plentifulness and excellent quality of the grass, formed in this part of New South Wales immense pastures, alike suited to the grazing of cattle and sheep. A similar advantage could not escape the English government; and at the very off-set of the colony hither were transported all the larger of its domestic animals. They have multiplied to such a degree that the number of horned cattle belonging to the state alone, at an epoch but little preceding our arrival at Port Jackson, was 1800, of which 514 were bulls, 121 oxen, and 1165 cows. The progress of the multiplication of these animals is so rapid that, in the space of only eleven months the number of oxen and cows had increased from 1856 to 2450; which for the whole year will give an increase of 650, or more than a third of the whole. If the multiplication of these cattle be calculated to continue after this rate for the space of thirty years, or even at a rate only half so quick, New Holland by that time must be covered by numberless herds of cattle\*.

Sheep have proved even more prolific; nay, so rapidly have they multiplied on these distant shores, that Captain Mac Arthur, one of the wealthiest proprietors of New South Wales, makes no hesitation in affirming, in a memoir published on this subject, that New Holland alone in the space of twenty years might furnish England with all the wool at present imported from the neighbouring kingdoms; the annual expenditure on which article every year amounts to 1,800,000*l.* sterling.

Mr. Mac Arthur himself now possesses more than 4000 sheep, the flocks composing which number I have visited, and found extremely beautiful†. "The climate of New South Wales," says he, in his interesting memoir, "is peculiarly adapted to the increase of fine-woolled sheep; and from the unlimited extent of luxuriant pastures with which that country abounds, millions of these valuable animals may be raised in a few years, with little other expence than the hire of a few shepherds. He calculates that they will, with proper care, double themselves every two years and a half;" and this his experience has shewn to be less than the truth. "The specimens of the wool," he says farther, "have been inspected by the best judges of wool in this kingdom; and they are of opinion that it possesses a softness superior to many of the wools of Spain, and that it certainly is equal in every valuable property to the very best that is to be obtained from thence."

Captain Mac Arthur is not the only one to whom sheep have proved the honourable source of considerable profit‡. On my different excursions I had frequent opportunity of

\* If the increase were computed at one-third of 1856 for the first year, and progressively every year to be equally great, that is to say, one-third of the whole, the number of cattle would be doubled every eight years, and in thirty-two years, or by the year 1833, would amount to the prodigious number of 18,560,000. If half this annual increase be allowed, or one-sixth of the whole, the herds would be decupled in fifteen years, and by the year 1832 would amount to 245,000; either number immense. *Tr.*

† Captain Mac Arthur's farm, which is a very fine one, and kept in excellent order, comprizes 3400 acres of ground, of which 3160 are in pasture, 40 in wheat, and the residue under culture for articles of inferior import. On this same farm are likewise 27 horses and mares, and 182 horned cattle, of which three are bulls, 55 oxen, and 124 cows. — *M. PERON*, The memoir to which *M. Peron* adverts in the preceding article, was presented by Captain Mac Arthur at the Right Hon. Lord Hobart's office, 26th July 1803; and a copy of it may be seen at large, Vol. 16, p. 163. of the *Phil. Mag.* *Tr.*

‡ Not indeed the only one, not only in New Holland but in Europe, who have been illustrated by this



of seeing flocks as remarkable for their number as their beauty. Mr. Palmer\* possesses 800 sheep; Mr. Marsden† a much larger flock: the major part of the other colonists have likewise their special flocks. Wandering amid the woods without enemies of any description, ignorant of wintry frosts and our autumnal rains, protected by friendly shades from the rays of the summer sun, and feeding on the most delicate and aromatic herbage, these flocks already exhibit singular strength and beauty, and are likely to attain perfection never known before. What, indeed, may not be expected from a climate which has produced changes so extraordinary and beneficial on the sheep of Asia and Africa. Every body knows that the flocks of Bengal and the Cape of Good Hope, instead of wool, are covered with a sort of hair, very short, harsh, and totally unserviceable to the manufacturer. In vain, as is said, have experiments been multiplied to ameliorate the fleece of these animals, or rather, to give them a fleece; they have either altogether failed, or have been attended with such little advantage, that the most intelligent proprietors of the Cape, and of Bengal, in rearing sheep, appear to reckon nothing on the fleece. In New Holland, on the contrary, by crossing these breeds with those of England and Spain, in less than ten years they have succeeded in transforming the hair of the sheep of Africa and Asia into a wool, which indeed has not yet attained any great length, but which is noticed for its fineness and its soft and silky nature. "As a proof," says Mr. Mac Arthur, "of the extraordinary and rapid improvement of my flocks, I have exhibited the fleece of a coarse-woolled ewe, that has been valued at ninepence a pound, and the fleece of her lamb begotten by a Spanish ram, which is allowed to be worth three shillings a pound."

It is not only in the quality of the wool that this amelioration is observed; it extends to the weight of the fleece. "When I left Port Jackson in 1801," says further Captain Mac Arthur, "the heaviest fleece that had then been shorn weighed only three pounds and a half; but I have received reports of 1802, from which I learn that the fleeces of my sheep have increased to five pounds each, and that the wool is finer and

this commendable and lucrative pursuit. To this England owes its wealth, and Florence its splendour. The profession of sheep-owner (*beccajo*) was in the time of Dante, and long previously, in such high esteem, that the most eminent nobility of Italy, (as is observed by the author of *L'ami des Hommes*, t. iii. p. 365,) thought the addition of this title to their distinctions rather an honour than a disparagement. Unfortunately this opinion so little prevailed in other countries, that Francis I. of France, took considerable umbrage at Dante having termed one of his ancestors *beccajo*; what with justice on one side of the Alps was considered meritorious as well as a denomination necessarily implying territorial possessions, on the other being foolishly regarded as degrading and offensive. TR.

\* The whole of the concessions to Mr. Palmer amounts to 1070 acres, great part of which lies on the river Hawkesbury. Of this territory 320 acres are in wheat, 20 in maize, 15 in barley, 3 in peas and beans, 2 in potatoes; 392 acres consists of pasture, on which the sheep are maintained, and, besides them, 17 horses and mares, 27 beasts, and a great number of hogs and goats; the 318 acres remaining, lately cleared, will soon be fit for culture.

† This gentleman, the pastor at Paramatta, is owner of 651 acres of land, 203 of which subject to various culture; independent of his flock, his farm supports 26 horned cattle, 30 hogs, and 10 goats. This farm lies at some distance in the interior of the country, on the left of the Paramatta river; from the summit of the hill on which it is situate, a part of the river's course is distinguished: the buildings are spacious and well fashioned; the garden and orchard already combines most of the fruit-trees in Europe. Still in 1794 the whole of this spot was covered with immense and useless forests of eucalypti. The site of the farm is 7 or 8 miles from Paramatta, in the midst of forests, yet was I carried thither by a charming road; in a very handsome one-horse chaise. What labour must not such a road have cost. Yet this road, the houses on the way, with the meadows, fields, and crops, were the work of no more than eight years!

softer



softer than the wool of the preceding year. The beauty of it indeed is such as to cause it to be estimated at six shillings the pound."

With respect to the sheep of Spanish origin, which form the main stock of the numerous flocks of New South Wales, they are the offspring of a pretty considerable number of beautiful Merinos, which the English government has caused at different times to be transported to Port Jackson, and of thirty rams of exquisite beauty, destined, as is said, as a present from the viceroy of Peru to the court of Spain, but intercepted during the war by an English cruizer, at a short distance from where they were embarked.

In the course of my excursions round about Paramatta, I procured a variety of animals. More than a hundred and fifty species of insects of novel description were added to my former collections; among these, forty butterflies, the chief of them of the most lively and splendid colours. Among the coleoptera, or beetle kind, was an admirable cetonias, classed by me under the designation orpheus, on account of a golden lyre most distinctly marked on the middle of its back; the colour of the back is an emerald green.

The family of lizards, which presents so many singular species in every part of New Holland, furnished me here with many of considerable interest. One of these belong to the genus *stellio* Cuv., and is remarkable above all its kind on account of the extreme flatness of its body, the thickness of which scarcely exceeds 2, 5 centimeters\*; it is in length 11 centimeters†; and in breadth 13, 5 centimeters‡, and imperfectly resembles the torpilla or torpedo. From the singularity of its shape, a shape hitherto undiscovered among this family, I have deduced its specific name of *stellio disciformis* N. It has a very large goitre, filled with air, of an extreme deep blue colour.

In the genus *scincus*, in that approximative genus which I have termed *scincoïdus*, in the *tupinambo*, and the gecko kind, Paramatta afforded me many remarkable species. I found here likewise that curious long-tailed gecko (*gecko platurus*,) described by Shaw, but which to me, by its form and habitudes, seemed so materially to differ from the generality of the gecko tribe, that I have ranked it as a new genus under the name of *geckoides*, which on account of its affinity, in the classification of modern naturalists, should immediately follow the gecko.

In fact, all the geckos hitherto known, have their toes short, broad, flat, depressed, and beneath exhibit a number of small indurated leaflets, by means of which they are enabled to climb the most polished surface, or even run like flies on the roofs of apartments. The *geckoides* on the contrary have their toes elongated, laterally much compressed, and are destitute of the leaflets by which the gecko is characterized. From this first difference in the organs of motion, results, that the *geckoides* are incapable of climbing, and passing a portion of their lives on trees like the major part of the geckos, with foliated toes. They inhabit low and muddy grounds, and live on the larvæ of aquatic insects, and on some even of these insects themselves. Their physiognomy resembles that of the gecko, and is equally melancholy and repulsive; their eyes are large and protuberant, the pupil lineary and vertical: the whole of their body is extremely flat, and their tail, shaped like the head of a spear, is divided into joints in such manner that one can scarcely touch it but it breaks off entirely from the body.

Along the arid and sandy coasts of Leuwin's Land, of Endraght, and De Witt's

\*  $\frac{22}{1000}$  parts of an inch.

†  $4\frac{1}{2}$  inches.

Land, I was enabled to trace none of the genus batracia, and was the less surpris'd as every where the great scarcity, or rather positive nullity of water, afforded no habitation for these animals, I did not however the less regret that I had not been able to procure a single one of this great family of reptiles when my stay at Paramatta enabled me to complete, in this respect, my zoological labours in New Holland.

There, in fact, I collected two hitherto unknown species of frogs, which I described one under the head *rana pustulosa*, the other under that of *rana pollicifera*, on account of its having on its hind feet a very salient appendage, which at first sight might be taken for a toe. The toad genus likewise afforded me two new species, the *bufo leucogaster*, and *proteus*: in the first species, indeed, the belly is of a shining whiteness, and the other exhibited a singular variety of hues. The protean toad is one of the smallest known, for it scarcely measures an inch in length; and by its pleasing and various shades of colour it differs materially from the disgusting genus to which it belongs.

On the banks of streams, in fountains, in the hollows of the coolest rocks, and beneath the foliage of trees, is frequently seen the magnificent species of frog (*rainette*,) described by me under the name of *hyla cyanea*. The whole back of this animal is of a very lively blue-purple colour, relieved on each side of the body by two glossy stripes of silver; the belly is of a deep Prussian blue. This species is one of the largest and handsomest of its kind; it is not less than fifteen centimeters in length\* from the nose to the extremity of its hind-legs. Among the other frogs I procured in my excursions, there is one remarkable on account of a vast number of black spots, round, circled with a white ring, and sprinkled on a ground of brown colour: I called it *hyla ocellata* N. A third received the denomination *H. nubulosa* N. on account of the vagueness of its colour. The *hyla janopoda* N. is distinguished by the beautiful violet-colour of its hind-feet. In the *citropoda*, all the joints of the hind-legs are marked by a large spot of a lemon-colour. Inferior in size to any I have mentioned, the *hyla rubecula* is sprinkled over with very small white points, on a light wine-les colour. Among the terrestrial and fluvia *conchæ* I likewise made some interesting discoveries, as I did also with respect to worms, and the fish of the Paramatta river; but so abundant are the new objects which presented themselves, that were I merely to enumerate them, I should be obliged to sacrifice the mention of things of more general importance.

The objects of our excursion to Paramatta being now completed, M. Bellefin and myself returned to Sydney Town.

Previous to the observations which follow respecting the scarcity or almost absolute want of rivers in New Holland, M. Peron fills a number of pages with the history of a Frenchman transported for forgery; but the relation being better adapted for the Newgate Calendar than a work of this description, is passed over. Preparatory to these observations, M. Peron gives account of those ideas affixed in Europe to the terms streamlet, river, large river, and torrent, at which part the translator resumes the work.

In Europe we apply the term streamlet to the union of several running springs in a continuous current of water of small extent, which after a limited course loses itself, now in different reservoirs, now in the sea, but which commonly falls into other currents of water of similar nature to itself.

\* A combination of many such streamlets in one current forms a river, which, with

\* Near 6 inches.

the characteristics of the preceding, possesses a course more rapid, and of greater length across continents or islands, and generally unites with streams similar to itself in forming large rivers (fleuves); these not only empty themselves into the sea, but have a very considerable length of course, and roll a broader volume of water.

Torrents, however great, materially differ from streamlets and rivers, as their course, dependent on the seasons or atmospherical vicissitudes, is not continuous but periodical.

These general notions settled, we shall apply them to the peculiar hydrography of New Holland, and in this instance shall see new phenomena worthy of profound attention, and not less remarkable than those before presented relative to the Blue Mountains and the north-west winds.

In fact, throughout the whole extent of this vast continent, comprising more than 100,000 square leagues \* of surface, no river has yet been discovered equal in size to the Marne or the Allier †, allowing that definition affixed in the commencement of this article to the term river.

In vain, every instant, does the navigator who sails along the coasts of this country, imagine he discovers in deep inlets, which admit of his penetrating to considerable distance, the mouth of some large river; the saltness of the fancied river diminishes not as he advances; and soon he distinguishes that it has no other motion than what is communicated by the tide. Still, the depth of water is so considerable, its breadth so great, and he proceeds so far inland, that the illusion yet continues. The navigation inland is further prosecuted; numerous creeks are seen which resemble the mouths of large rivulets; the creeks are examined, but no where is fresh water found. Expectation disappointed, is still sustained by the imposing appearance of the principal branch, which yet preserves the similitude of a great river. The navigator has now ascended it sixty or eighty miles, and trusts to proceed much higher. Vain hope! the majestic river dwindles to a wretched streamlet, incapable of floating the lightest boat, and which at different seasons of the year is but a few inches deep. The astonished traveller halts; and when he perceives that the ebb and flow of tide is almost equally perceptible at the extremity as at the beginning of his navigation, he wonders at the very slight fall in the nearly level surface of the country.

Such is the general picture of the rivers of New Holland, there is not one but it suits in the most literal manner, and without other modification than results from its greater or less extent. Thus, King George's River, Cook's at Botany Bay, that of Paramatta at Port Jackson, of Hawkesbury at Broken Bay, the river Hunter, Endeavour River, all the rivers of the Gulf of Carpentaria, recently explored by Captain Flinders, the rivers or havens of the Bay of Sharks, the River of Swans, that of the Bay of the Geographe, the Port of King George, Bonaparte Gulf, Josephine Gulf, Philipps's Port, the Western Port, &c.; all of them present a series of phenomena analogous to the picture I have given. Even Diemen's Land, notwithstanding its different geological constitution, in all its rivers exhibits the same singularity. The river Huon, Swan Port, the North River ‡, Dalrymple River, &c., are but so many gulfs more or less narrow, but all essentially salt, all affected by the tides, and indebted to them chiefly

\* 766,215 square miles English of 69,2 to a degree; [the French league being that of which there are 25 to a degree; but here M. Peron speaks at random, for New Holland comprises a surface of at least 2,739,600 square statute miles, or upwards of 350,000 square leagues. TR.

† The breadth and volume of the Trent. TR.

‡ The Derwent; this is a mistake noticed in Chap. xii., the river, as there observed, being navigable much beyond the mountains where it was supposed by the French geographers to have its source, and having, according to Captain Flinders, from three to four fathoms of fresh water. TR.

for what motion they are liable to, and terminating all of them in scanty rivulets, almost entirely dry in the hot season of the year.

However singular the circumstances already adduced relative to the rivers of New Holland, still are not these their only peculiarities; we shall presently notice in their overflowings a new subject for meditation and enquiry: in the interim it is requisite I terminate what respects my first excursion to Paramatta.

It is not only by opening new and commodious roads that the English government seeks to facilitate communication in this colony: from the close of 1793 it has established packet-boats, which sail every day from Sydney and Paramatta, and carry goods and passengers. The fare is one shilling for each individual, and the same for every hundred weight of merchandize or goods. The whole boat may also be hired for six shillings. Besides these means of transport common to the public, the government has a number of very comfortable, and even elegant boats, for its own use and that of its officers; and in one of these it was that M. Bellefin and myself returned to Sydney. We embarked opposite the barracks at Paramatta; a spot where the river still preserves sufficient depth of water to float the largest boats, while two hundred paces above, it dwindles to a scanty rivulet, incapable of floating the most slender pirogue.

In proportion to the distance, below Paramatta the river becomes broader and more deep, and in a short time has depth sufficient for the largest ships to navigate, not less even than from eight to ten fathoms. On both sides the river, attention is excited by a variety of small coves, penetrating in a less or greater degree into the country, their margins pleasingly decorated with superb woods. Already, however, has the European marked his residence in these parts by different portions of land cleared of trees. Here, at the extremity of a verdant creek, is seen the humble cottage of the new colonist; the founding axe heard from a distance announces his labour and activity: beyond, in natural meads, stray the cows, steeds, and oxen, yet few in number, of the infant farm; in other spots are seen the ripening crops of fields so recently submitted to culture. Occasionally, in the summit of some picturesque slope, the larger and elegant abode is distinguished of a proprietor more wealthy and more active than his neighbours, surrounded by wider fields, more numerous servants, more extensive crops: of this description was the seat of Mr. Cox, paymaster of the colony, whom I had seen at the house of M. Paterfon. As soon as we were perceived by this gentleman, he put off in a boat belonging to the farm, and invited us in so pressing manner to rest ourselves awhile at his house, that we could not refuse.

While dinner was hastily getting ready, we employed ourselves in looking over the minutiae of the farm, all of which to us were sources of astonishment. Still was not this the only farm which Mr. Cox possessed on these shores; on a second visit I paid him, in company with Colonel Paterfon and others, Mr. Cox took us to another much finer and more fertile in the interior towards Castle Hill. The road which leads from one of these farms to the other is tolerably wide, and commodious enough to allow of our travelling in a carriage; it is nevertheless six or seven miles in length; and in order to make it, it required a vast number of trees should be felled. The whole amount of the grants of land to Mr. Cox is eight hundred and sixty acres, more than three hundred of which were sowed with wheat, fifteen with maize, six with barley, twelve with oats, &c.; three hundred and forty-nine acres were reserved for pasture, the cattle on which consisted of five horses, three mares, twenty-seven horned beasts, and eight hundred sheep of the finest fleeces. Mr. Laycock, a gentleman of our party, quarter-master of the regiment, possesses fourteen hundred and

seventy acres, principally situate in the most fertile parts of the colony. At the different farms which make up this number of acres, he has six horses and mares, one hundred and twenty-eight horned cattle, of which fifty-three oxen and seventy-five cows; and very numerous flocks of sheep.

After thanking Mr. Cox and his lady for the civilities we had experienced, M. Bellefin and myself returned to our boat, and in a few hours time reached Sydney Town.

While I was pursuing the different observations I have related, my worthy friend, M. Lefueur, had been employed in making a rich ornithological collection; he had killed more than two hundred birds: add to this, our zoological store was increased by sixty-eight quadrupeds, the result of his activity; a vast number of drawings and colourings also had been completed.

As so many of our two crews had perished, owing to the long privations and the horrible epidemic to which they had been subject, as the remainder was no longer competent to navigate the two ships, as also we had from experience been taught that these ships were themselves of too great burthen for the geographical details we had yet to complete, either on the south-west, or north-west parts of New Holland, it was determined the Naturaliste should be sent back to France, after taking out of her almost all the sound men on board and substituting in their stead the convalescents and valetudinarians of the Geographe. A bark of thirty tons was on the stocks, and this was purchased as a consort for us, the command being given to M. L. Freycinet, first lieutenant of the Naturaliste, and the author of the chief geographical works effected on board that corvette. Captain Hamelin himself was to return to Europe in his corvette, and render account to government of the results of the voyage.

M. Lefueur and myself found ourselves, in consequence of this resolution, fully occupied in arranging the different objects we had to forward to France by the Naturaliste, and were from that instant obliged to suspend our researches. What perseverant labour, in fact, must it not have required to dispose methodically more than forty thousand animals, of all classes, collected from so many shores in the course of the two years past. Thirty-three large cases were filled with these collections, the most numerous and valuable that any traveller before had transported to Europe, and part of which only, displayed in the large house occupied by M. Bellefin and myself, excited the admiration of all intelligent Englishmen, but especially of the celebrated naturalist, M. Paterfon.

Of all known countries there is not perhaps another in which electrical phenomena are so frequent and terrible as in this singular climate. In the run from the Montinette Islands to Port Jackson, we had already observed with much surprise the continuity of phenomena of this description, in a season, and during the prevalence of weather so little adapted to their development; but, during the latter part of our stay at Sydney, we witnessed storms so violent and so repeated, that our astonishment was considerably heightened. Never had we heard before such tremendous claps of thunder, or seen the atmosphere furrowed by lightning so vivid and so successive. In one of these tempests the English ship *Perseus*, which was destitute of a conductor, was struck by the lightning and nearly perished.

The 7th October presented us a phenomenon of this kind of which I know of nothing parallel in meteorological annals. The weather in the fore part of the day had been remarkably fine; a calm reigned as well in the atmosphere as on the sea; but, in the afternoon, the wind veered suddenly to the north-west, blowing strong and in squalls; a vast collection of large black clouds, borne by these winds from the summits of the Blue Mountains, were precipitated into the plain. The clouds were so heavy  
that

that they nearly skimmed the surface of the ground. The heat was suffocating; Reaumur's thermometer almost instantaneously rose from 18 to 27°\*. In a little time the clouds opened with a horrid crash, the lighting now almost deprived the gazers of sight by its lustre, and now darted through the air in a serpentine blue line. At this period the wind blew in all directions, and with increased fury. Several showers of rain falling we trusted the storm would speedily blow over, when, from the deep bosom of a higher floating cloud, much more black than the rest, there suddenly fell a copious shower of hail, the stones of which were even more remarkable for their shape than their highly extraordinary dimensions: Some of these stones weighed nearly three decagrammes†; and all of them, in lieu of the globular shape of the hail of our climates, were of the form of an elongated and irregular prism, the proportions of which in one of the largest I could find were in length 65 millimeters‡, breadth 39 millimeters§, thickness 18 millimeters||.

However strange to us hail in this shape, it was not so to the English, who, since their settlement on these shores, had had frequent opportunities of remarking it, but at no time with characteristics so prodigious as in the month of December 1795. The precision of the following account by Mr. Collins was attested to me by some of the most respectable and enlightened inhabitants of the colony.

(December 1795.) "The beginning of this month," says Collins, "was remarkable for a meteorological phenomenon of a very extraordinary kind. Four farms on Rufes's Creek were entirely laid waste, not by fleet or hail, but by the fall of large masses of ice. Lieutenant Abbott, the military officer in the command at this station, in his report of this event to the governor, relates that the storm proceeded from the north-west. The effect of it was tremendous: the wheat was laid flat on the ground, the ears cut off, and the grain perfectly beaten out of the ear; even the thickest stems of maize were unable to resist its violence: the sides of the trees exposed to the storm seemed as if shattered by small shot; and the earth was covered with their twigs and branches. The temperature of the two succeeding days was extremely mild, notwithstanding which the hail-stones still laid on the ground nearly as large as at their first falling. Some pieces of this hail brought to Hawkesbury by Lieutenant Abbott, two days after they had fallen, were still from six to eight inches long. This storm was felt neither at Sydney nor at Paramatta."

How singular the climate which in every part of its history presents a phenomenon so passing strange.

Soon as our different collections were arranged, I set off with Colonel Paterfon to visit the settlement at Castle Hill. After ascending the Paramatta river the space of about three leagues, the colonel and myself, attended by a party of soldiers, landed to commence our search after objects relating to natural history. In midst of those different trees, which time or the axe had in every part levelled with the ground, we found beneath their fungous and putrid bark, at every instant, beautiful coleopteræ, divers species of lizards, and many reptiles, of which we made a large collection. As we penetrated deeper into the forest, where hitherto the axe and fire had not been introduced by the English, we observed insects to be much more rare than elsewhere; a singularity which we attributed to the practice of the savages of setting fire to the woods, and of thus destroying with them an enormous quantity of the eggs of these insects, of their larvæ, and even of the insects themselves.

\* 64.4° to 80.6° of Fahr.

† Upwards of two inches and a half, Eng.

‡ An ounce and eight-tenths of a dram, Eng. avoird.

§ One inch and a half. || Seven-tenths of an inch.

Whether owing to the congeniality of the nature of the light and sandy soil, or to the climate, the peach, of all European trees, is that which has best succeeded in New South Wäles. There are orchards entirely composed of this fruit-tree, and it yields such large crops as to admit of many being dried for preserves: many make from the juice of them a very pleasant wine; some distil brandy from them; and in certain instances they are so numerous as to be given as food to pigs.

On reaching Paramatta, Mr. Paterfon and myself took up our abode in the government-house, which I have elsewhere described; and the next day proceeded with the kind M. Cayley on our courses of natural history. With what interest for several days did we traverse these scenes so rich in productions unknown to Europe! With what ardour vie in our explorations! And with what kindness did my respectable fellow-labourers add to the collections I made those articles which escaped my notice!

On these little excursions, so truly full of charms, I frequently made an observation sufficiently important to attract particular attention. In the deep vallies which we oftentimes passed, ran rills of water, so slender, and of such narrow breadth, that the widest of them might be stepped over with greatest ease; still, at the height of fifteen or even twenty feet above their ordinary level, on the ground itself, and on the trees, were evident marks of the recent ravage of the torrent. My companions confirmed the truth of this remark from their individual observations, and furnished me with valuable documents on this subject, which, combined with those I had previously obtained, or afterwards succeeded in obtaining, allow of my presenting with greater interest the singular history of the inundations of the rivers of this part of New Holland.

We have already seen that the whole of these rivers, however wide their mouth, are nothing but gulfs filled with sea-water, which terminate universally in slender rivulets, almost utterly dried up at one season of the year, and subject at times to a prodigious increase in the volume of the waters they bring down. We are now about to revert to the inundations of these rivers; but, in order that the reader may be enabled to comprehend more fully that which their origin and effects present of surprizing, it is necessary we should give a more detailed description of the Hawkesbury river, a river which has exhibited a series of the most wonderful phenomena of this kind, and those the best suited to throw light on the great extent of the mountains we have already described.

Eight or ten miles north of Port Jackson is the singular opening to which Captain Cook, who had but a cursory view of it, gave the name of Broken Bay, on account of the rent and broken appearance of the contiguous country. This bay at its entrance separates into many branches, three of which are larger and more remarkable than the rest. The most capacious of these is that of the north, but, at the same time, this is the most useless, seeing at low tide its mouth has no more than twelve feet water: that on the south, which Commodore Phillips esteemed the most beautiful piece of water he had ever beheld, and which he denominated Pitt-Water, is very extensive, and might easily, according to that illustrious navigator, contain the entire navy of Great Britain; it is however, unfortunately, obstructed by a ledge of rocks, on which at low tide there is but three fathoms water, a circumstance that prevents its receiving large ships. The third branch of Broken Bay, the direction of which is south-west, is more narrow than Pitt-Water, but its depth being every where from five to thirteen fathoms, it is capable of receiving vessels of the largest size.

Beyond these three principal branches, Broken Bay still forms a number of narrow and deep creeks, after which the bay itself narrows where the river Hawkesbury terminates; that river the origin of which we are about to trace.



The whole county of Cumberland, as we have elsewhere said, is environed by the inaccessible chain of Blue Mountains. From the most precipitous part of these singular mountains, and directly west of Broken Bay, the river Grose, which commonly is but a trickling rivulet, falls in a long succession of cascades. On reaching Richmond Hill, a very remarkable spot of which mention will be made, the Grose becomes confounded with the Nepean; and both these rivulets, at the point of junction, lose their name. The whole course of the Nepean is hitherto unknown; on ascending it, however, you proceed:—first, to the feet of the mountains, and along their sides, in which course it describes a great curve to the parallel of Mount Hunter; then towards the south through very fertile meadows, which it frequently overflows; and lastly, the mountains themselves, from which it runs; beyond which point nothing is known of its origin or extent. Were one to judge from its diminutive breadth at this point one should esteem the source of the river at hand, but the immensity of the inundations produced by the waters it occasionally brings down, sufficiently refutes this supposition, and proves that it springs from a considerable distance within the mountains, and has very vast ramifications. Often, indeed, this river, apparently so despicable, suddenly swells; its waters rise to a considerable height; exceed their accustomed barriers, and roll their wasteful torrents over the neighbouring fields, spreading afar their ravage and exciting general alarm. Hitherto strangers to these frightful floods, the English who first settled on the Flawkesbury river, experienced considerable injury from them; and even since they have found no other means of avoiding the spoliations of the floods than by constructing their dwellings at distance from the dangerous banks of the river, or on eminences above the rise of its waters. Still, spite of this double precaution, the farmers in the neighbourhood of the river are far from conceiving themselves secure from disaster; and how, in fact, can they reckon on always escaping from inundations in which the waters rise above the common level of the river from twenty-five to thirty, forty, and even fifty feet\*; inundations which bear no relation to the natural course of the seasons, and which have been known to be renewed even as often as eleven times in the year. These last circumstances indeed more particularly merit our enquiries and meditations.

Every body knows that in equatorial climates the year is divided into two chief seasons, the dry and the rainy, this last corresponding to the epoch at which the sun reaches the tropic from the equator, enveloped, as one may say, in the vapours which his beams have raised, and which incessantly resolved into rains fall in torrents, and are replaced by new aggregations of vapour subject to like revolutions. At this epoch all the rivers swell and overflow their banks, extensive lands are buried beneath their waters, and even the air is filled with moist and dangerous haze. But now the sun retrogrades towards the opposite tropic, and carries in its suite its vapours and mists, its torrents and humidity, and suddenly, in the regions it leaves, the air becomes more purified, the moistened soil resumes its solidity, the rivers enter again their accustomed beds, and vegetation shews itself more rapid from the heat having distended the vessels, and mollified the texture of plants. The effects to which animals are liable are analogous; their relaxed fibres become more tense, epidemics cease, and the human race is again restored at once to plenty and to health.

This rapid sketch of the progress of the seasons in equatorial countries equally suits those regions immediately bordering on them; and, as high as 30 or 35 degrees of latitude south, all the grand phenomena of meteorology more or less affect the regular succession of which I speak.

\* In 1809 or 10 they rose sixty-five feet. Tr. From Port Jackson Gazette.

These principles admitted it would not be extraordinary if the county of Cumberland, comprized within the 35th degree of latitude south, should be exposed to considerable inundations, did not the very nature of these inundations present the most evident proof of their not being consequent on the rotation of the equatorial seasons. For in this rotation every thing is immutable, the rains and inundations have their distinct and appointed period; they may be calculated upon and provided against; they occur but once in a year and never happen in opposite seasons. While on the contrary, in what relates to the Hawkesbury River it has already been proved by experience, 1st, that the overflowing of this singular river takes place in all seasons of the year; 2d, that the recurrence of this circumstance varies from once or twice to eleven times in a year, without any reason assignable for the difference; 3d, that these prodigious inundations have no relation whatever to the constitution of the atmosphere as affected either by the violence or direction of the winds; 4th, that they are indeed oftentimes preceded by violent tempests, but that these tempests themselves may devolve from any point of the horizon without their influence on the inundations appearing more or less considerable; 5th, that not only have these inundations no general relation to the season of the year or the nature of the winds, but they do not even preserve any order with respect to their recurrence: in fact, six months have past without any flood happening, while again, three or even four times in a month has the river overflowed its banks.

From all these facts we may then deduce the remarkable consequence that the overflowing of the rivers of New South Wales is not owing to the same causes as the inundations of equatorial countries, or even of those bordering on the tropics.

On the other hand, these phenomena are as little explained by what takes place in temperate climates, where the grand floods are chiefly occasioned by the melting of the snow, and in accumulated mountainous regions. The thaw in these is annual, and periodical; it commonly takes place in the spring; at times, but very rarely does this happen, it is delayed until the dog-days: but when was it observed in midst of the winter's cold?

No other cause therefore remains to which to assign the overflowings of the Hawkesbury River, but the frequency and abundance of the rain which falls on these mountains where it has its source: but, allowing this, how wonderful must these heavy rains appear which can suddenly occasion the waters of a small streamlet to rise to the height of from 30 to 50 feet, which happen at the most opposite seasons, occur so frequently in a year, and in a manner so independent of the constitution of the atmosphere, of the course of the winds, or of tempests! On what an immense extent of country must they not fall at the same time! How rapid their course through the mountains, at once, and almost instantaneously, to unite in such prodigious masses! It must be allowed that, in this, as in many other phenomena, New Holland defies our conclusions from comparisons, mocks our studies, and shakes to their foundations the most firmly established and most universally admitted of our scientific opinions. As we proceed in speaking of this continent, justly denominated by the English the unequalled and wonderful, we shall find still other and not less inconceivable examples of these apparently whimsical freaks of nature: but before we revert to the small streamlets of Paramatta, which induced us to travel to the banks of the Hawkesbury, let us first terminate what relates to this singular river.

If, by its inundations, it spreads alarm among the cultivators settled in its vicinage, what benefits, on the other hand, does it not diffuse over the country through which it flows:

flows: bearing along in its course, from the summit of the mountains, and from the interior of the continent, all the vegetable earth it meets in its way, it precipitates this earth into the vallies, deposits it into the fields it overflows, and accumulates it there in invaluable beds, the depths of which, according to M. Mariden, is not less than from 30 to 60 feet; thus furnishing inexhaustible aliment for the most active and varied culture! Indeed, in no part of the world is the fecundity of the banks of this Austral river exceeded; without much toil, and with scarcely any tillage, the earth here presents the most grateful crops; wheat has here been seen to yield, the first year of breaking up the land, 95, barley 140, and maize 200 for one. This is the chief granary of the English colony, and hence does it draw the provision of wheat necessary for its support; it is another Delta, comparable in every respect for fertility to that of Egypt. The English, in fact, commonly designate this river by the title of the Nile of New Holland\*, nor are many circumstances wanting to justify the comparison; like the Nile the Hawkesbury River hides its head in mountains which forbid access; like this African river it is subject to overflow, and as does that brings from the mountains a vegetable earth to depose it in the valley through which it takes its course; finally, like the Nile, it is the source of abundance and happiness in a country generally wild and barren.

The chief difference existing between the two rivers is, in the circumstance of the overflowing of the Nile being only singular in the year and periodical at the same season, so that the time of its occurrence, its progress and effects may be calculated; while nothing similar applies to the Hawkesbury River. Another difference may be pointed out: in Egypt the failure of the expected inundation is a source of dread to the farmer; in New Holland the excess of the floods. Thus, even in its resemblance to the most extraordinary phenomenon of the Old World, the southern continent appears to mock all reasoning deduced from analogy.

The singular picture I have exhibited not only suits the river Hawkesbury; all the other rivers, and even all the rivulets of the county of Cumberland, are subject to similar increase, an increase apparently to be ascribed to copious rains falling on a connected space of greater or less extent.

The lady of Colonel Paterfon, who was anxious of accompanying us to Castle Hill, had come in her carriage to Paramatta†. We immediately after set out to join Mr. Cox and his family at the farm he occupies on the side of the river, which I have before described; here we slept, and the next morning early our whole party, enlarged by the addition of our hosts, departed for the spot we were about to visit.

In proportion as we proceeded farther from Paramatta, the elevation of the ground became greater: the vicinage of Castle Hill consists of a number of hills divided from each other by pleasing vallies, through which serpentine occasional slender rivulets. The vegetable earth here seems, generally speaking, deeper and of superior quality to that at Paramatta.

Of all the settlements in New South Wales the most recent is Castle Hill; when I was there scarcely three years had elapsed from the foundation of the establishment.

\* Collins, page 415.

† Here I cannot refrain a remark of importance: while I have seen colonies belonging to powerful European nations, and established for centuries, in which not a single carriage is kept, as an object of luxury, and in which it would be impossible to make use of them, owing to the badness of the roads, in the town of Sydney alone no less than eight or ten carriages of great elegance and beauty are kept, independent of a number of whiskies and gigs, distributed over the whole surface of the colony. In the slightest of these vehicles may the county of Cumberland be traversed in every direction; still, not twenty years have elapsed since the first appearance of civilized men on these shores!

The growing town consisted then of no more than about a dozen houses: but already large openings in the woods of the neighbouring hills were effected, and several pretty farms were seen in the valleys. Six hundred convicts were employed in cutting new roads through the forest, and in twenty different places rose immense clouds of smoke, arising from the combustion of the trees felled on the newly ceded lands.

For a long time the English government, in order to prevent these destructive conflagrations, ordained that the lands should be cleared merely by felling the trees: it was hoped that the salient part of the stem, and the roots of them, soon decomposed by heat and humidity, so far from being injurious to the labours of the field, would become a valuable compost. This measure is said to be practised with success in various parts of America; but the result was difficult in New Holland, as if experience should, in every instance on this continent, be found of no avail! The wood of the eucalyptus, which is so rare a circumstance to meet with perfectly sound, even in growing trees, and which promises to be liable so soon to perish, preserved doubtless by its resinous matter from the destructive action of the air, is proof against all changes of weather: in every quarter are seen yet in sound condition the remains of those trunks felled fifteen years before, as well as the roots, which, from their spreading wide and near the surface, greatly impede the labourer in his toil. In order to remedy this inconvenience, the cultivator is obliged to dig up these roots and stems, though sometimes they are consumed by fire, kept up for whole weeks together, for this purpose.

This difficulty, which was not foreseen by the English, obliged them to renounce the first mode adopted for clearing the lands, and to have recourse to fire: the method used is: first, to insulate the portion of the forest to be cleared by creating large intervals; fire is lighted then at different places, and a few days suffice to annihilate the growth of centuries. This last method, besides it being the quickest and most easy of effectuation, has the further advantage of extirpating, as I may say, all heterogeneous plants; it likewise, at the same time, imparts a beneficial warmth to the earth, which disposes it to yield more abundant crops in the first instances; and the ashes of the burnt trees furnish an excellent compost.

After taking refreshment at Castle Hill, we went to visit a neighbouring estate: "I wish," said M. Paterson to me, "to introduce you to a former countryman of yours, whom I rank among my friends; it is M. de la Clampe, once a colonel in the French service, who acquitted himself in an honourable manner during the last wars in India, and who, forced by the events of the revolution to seek an asylum in England, constantly refused to take up arms against his country. Tired, at length, of an inactivity so little corresponding with his taste and former habits, he entreated to be allowed to settle in these distant climates. Not only did the government comply with his request, it, moreover, shewed its liberality to this respectable character in a manner that has insured him, if not a brilliant, yet an ample and comfortable subsistence for the remainder of his life. In the three years he has resided at Castle Hill, he has only once been to Sydney Town; he avoids society, and excuses himself from complying with the repeated invitations of his friends to dedicate his whole time to the pursuits of agriculture; of his knowledge and industry in this occupation you will soon be enabled to form a judgment."

We had now walked for the space of a quarter of an hour through a tufted wood, when the modest abode and fields of the poor French colonel opened on our view. At the head of six convicts, furnished by the English government, we found him, setting them himself an example of labour; and, like them, nearly stripped to the skin. The unexpected arrival of so numerous a party at first disconcerted M. de la Clampe, who

seemed mortified at appearing before us in a dress so truly wretched that with difficulty did it allow of our discriminating between the master and the men. He hastily ran to the house, in order to dress himself, and in a short time was with us again.

The interior of the rural manor house, into which we entered, combined, with the greatest simplicity, a species of elegance, which clearly evinced the genius and taste of the owner; and this the more from the total absence in it of any thing like pomp.

Mr. Paterfon now introduced me to M. de la Clampe, and informed him of my object in visiting this country. On hearing I was a Frenchman, the unfortunate emigrant advanced towards me, and embracing me with transport: "Ah Sir," said he, "how is it with our dear France?" What pleasure did I not receive in detailing to our interesting countrymen the succession of prodigies by which a great man had succeeded in restoring happiness and peace to our common country! With what attention was my narrative heard! With what tender earnestness did the good colonel imprecate the blessings of Heaven on the head of the First Consul, and put up prayers for his long life!

After a frugal repast, we sallied forth to examine the farm of our host, he himself being our guide, and dilating, with visible gratification, on the most minute works, and their success: but of all that he pointed out nothing so forcibly excited my attention as a beautiful plantation of cotton and cocoa-trees, in a very promising condition. M. de la Clampe assured me that, by a series of tedious and very nice experiments, he had succeeded in raising cotton-trees, yielding cotton of various shades, and especially that peculiar to the fine nankeens of China, a fast colour hitherto not obtained, whether by dint of culture, or by dyeing. "Either I am much mistaken," said the colonel, "or in a short time I shall have created two branches of commerce and exportation for this colony of the greatest value; I have but this means left of acquitting the sacred debt I owe to a nation which gave me shelter in the hour of misfortune; and I am the more impatient for the moment which will enable me to satisfy this first desire of my heart, as a testimony of gratitude like this will best agree with my sentiments of delicacy and patriotism."

While I was thus employed in investigating a considerable portion of this singular colony, two of my colleagues, Messrs. Depuch and Bailly, mineralogists, belonging to the expedition, paid a visit to Tongabee and Hawkesbury, the two last towns of the county of Cumberland, and penetrated as far as to the western mountains. I shall here transcribe the chief details of their interesting excursion from the manuscript afforded me by M. Bailly.

Our friends left Sydney Town, in company with the chief physician Mr. Thomson, in the morning of the 21st of October, proceeding by water as far as Rose Hill, landing when at about two-thirds of the distance, to visit a small brewery at which beer of an inferior quality is made from maize and a decoction of hop sent from England.

On arriving at Paramatta our two mineralogists visited the bed of the river, or rather the rivulet of this town. "The breadth of this bed, and its depth," says M. Bailly, "compared with the small stream of water flowing in it at that time, but too forcibly shew the prodigious swell to which it is subject, and which occasionally desolates the land; but these inundations, so alarming for the inhabitants, singularly assist the geologist in exposing to his view the constitution of the country.

"As, we shall soon demonstrate, the strata of freestone, of which the whole of the country of Sydney Town and its environs is constituted, extend thus far, and even much beyond this point; but these strata at Paramatta are distinguished from those at the former place by being incumbent on bituminous schistus impressed with the

figures of plants, among which many species of fern. The thickness of the strata of freestone above the schistous layers is of several feet. The schist is disposed in horizontal beds, and is alternated with freestone, and pudding-stone, impregnated with a black and bituminous matter. In midst of all these substances it is that the rivulet of Paramatta takes its course.

Were it allowable to judge from analogy, and from indices without number presented in the constitution of the soil, one might conclude that a considerable quantity of coal exists beneath Paramatta; and the discovery of this article at Port Stephen on the north, and at Hacking Port on the south of Port Jackson, tends much to confirm this conclusion. It may even be inferred that the seams of Paramatta lie but at little depth below the surface: this last circumstance, the position of the town in the centre of the country, and the facility afforded to transport, uniting in affixing importance to a mine here; should it really exist, it may reasonably be conceived, that the British government will not long delay availing itself of the advantages it must afford.

At the distance of four miles west of Paramatta is the rising town of Tongabee, whither our companions repaired: "Part of the way thither," continues M. Bailly, "is through woods, the residue between fertile fields, in a state of cultivation, spreading over Constitution Hill. As yet Tongabee is only a village of scattered houses; it stands on the margin of a rivulet in a fertile valley, surrounded by hills of slight elevation, all of them submitted to culture. Wheat forms the principal article here, and when we were at this place it was in flower and promised a grateful harvest. Tongabee, indeed, with good reason, is reckoned one of the granaries of the colony. The population did not to us appear considerable, but a pretty large number of houses built of wood, and empty at the time, announced more occasional inhabitants than we had opportunity of seeing. We indeed learnt that most of the land at Tongabee being under culture on account of government, the convicts employed on the works of the field reside here only at those periods when their labor is required, after which they are removed to different points of the colony where public or private works exact their service."

"The road leading from Paramatta to Tongabee, and from this last spot to the town of Hawkesbury is wide, and kept in excellent order; inspectors appointed by government, looking to the preservation of it in good condition, and directing the necessary repairs."

"To the distance of three or four miles beyond Tongabee the land is almost wholly cultivated, and is covered with houses and farms of less or greater extent and beauty. Beyond this distance you reach a rivulet, which runs by the foot of a hill of little elevation, but steep, and over which a bridge is thrown. At this rivulet the clearance of the wood terminates towards the N. E. of Tongabee. In this part of New South Wales a great number of cattle is reared, which, spread over the country, might effect considerable injury to the fields in culture: to prevent this the proprietors have adopted a mode of enclosure practised in North America, a mode which a great superfluity of timber alone can justify. Large trees are laid horizontally on the ground, one upon another, and disposed in a zig-zag manner, so as to present alternately a salient and an inner angle."

"The water of the rivulet of which I speak has a slightly saltish taste, a taste not to be attributed to any admixture of sea-water; this indeed less on account of its distance from the ocean than the different level over which it runs. This brackishness is the result, without any shadow of doubt, from its washing in part of its course some mine



of rock salt, as in various parts of the county of Cumberland large blocks of this salt have been found.

" Crossing the rivulet, until we reached the parish of Hawkesbury, we saw neither houses nor culture. The whole intermediate space is covered with wood, and is only removed from a perfect flat by a few very slight undulations of surface. Here and there ponds of fresh water are seen apparently formed by the rains.

" The thickness of the forest had hitherto excluded all sight of the Blue Mountains, when, at last, a few miles before we reached Hawkesbury, a natural opening presented them to our view. From this point they shewed themselves in form of a vast curtain stretched towards the N. W. along the horizon. No break, no peak was perceptible, the course of this immense chain was marked by one regular horizontal line.

" At about a mile from Hawkesbury we quitted the forest, and the eye wandered with pleasure over well-cultivated lands, meeting with no obstruction but the mountains, which, at a distance of seven or eight miles, rise like an immense rampart. A number of houses, irregularly disposed on the right bank of the river, in this place very steep, forms what is denominated Hawkesbury Town. Among these houses, that of the governor is distinguished from the rest by its handsome appearance, and by its favorable site; it is separated from the river only by a very large garden terminated by a handsome terrace. A number of other houses dispersed over the adjacent country announce so many rich farms to which they belong. A sheet of fresh water curves in a serpentine form through the country comprized between the forest we had just left and the Hawkesbury River. This sheet of water, confined by lofty banks, is of great depth, and about twenty paces over: it is crossed by a wooden bridge, erected by a private person to whom in consequence the government granted a right of toll for a certain number of years."

At Hawkesbury our friends took up their abode at the house of M. Arndell the physician and chief magistrate of the town \*, to whom Governor King favoured them with letters of recommendation, and who received them with the most friendly kindness. At the spot where the town is situate the river is about as broad as the Seine at Paris, and high as here vessels of fifty tons are able to ascend. " This river," says M. Bailly, " did not appear to us to abound in fish, but it produces sparingly two kinds, one resembling the carp, and the other the gudgeon."

After a cursory glance over the town, my companions proceeded to the foot of the Blue Mountains by water. The benevolent M. Arndell procured them a guide who knew the country, on which M. Bailly thus pursues his remarks. " We travelled through well cultivated fields, in midst of which were sprinkled houses and farm-yards forming a pleasing contrast with the forests by which a portion of the country continues yet to be covered. Three or four miles beyond the town cultivation ceases, and at this distance the forest again is seen uncleared, stretching along both sides of the river, which in this part is constantly of considerable breadth, though become so much shallower as to have but five or six feet water. Numerous trees here obstruct its course and render it difficult of navigation; running foul of one of these we with great difficulty were disengaged.

" On the left bank of the river, where the forest begins, an escarpment is seen, the talus of which forms an angle of more than 80 degrees. This escarpment continues along the river the space of two miles, and is wholly composed of black schist apparently in horizontal layers. Notwithstanding the steepness of this declivity, paths were dis-

\* This gentleman possesses an estate of 630 acres, of which 70 consist of wheat, 40 of maize, 20 of barley, &c. tinguished



tinguished which our guides averred were frequented by the natives, on the expertness and agility requisite for which purpose no comment is necessary.

“ On the margin of the river we perceived, at intervals, shingle in great heaps, borne down by the violence of the stream. This shingle consisted of a mixture of granite, porphyry, and other matter brought from the primitive mountains; smaller and more rare in the vicinage of Hawkesbury, the stones encrease in size and frequency as the river is higher ascended: these last circumstances engendered the hope that we should in little time approach the site of their origin, and the presumption was farther augmented by the proximity of the mountains.

“ Beyond the escarpment I have noticed, the country again becomes visible, and farms and cultured lands border both sides of the river. At the extremity of these lands, on the left bank of the stream, is a small mount of slight elevation, termed Richmond Hill, where the country ceases to be cleared, and where also the river is no longer navigable by boats of any great draught of water, on account of sand banks by which it is obstructed. M. Arndell, who had foreseen this obstacle, had directed our boatmen to procure for us at Richmond Hill a very small boat, capable of carrying us over these banks.

“ We now soon reached a small low islet entirely composed of shingle, on which grow some stunted trees. Here the right arm of the river \* was nothing but a slender rill, and the left arm † alone was navigable: this arm, however continued so but for a short distance, being obstructed by beds of shingle, on which we continually grounded. Moreover, the slope of this branch was so considerable here that, in order to overcome the strength of the current, the men were obliged to get into the water, and drag the skiff along.

“ After contending for a long time with this last obstacle we resolved on landing, and got on shore on the islet noticed. The shingle of which, as we have observed, it is composed, consists of a variety of substances, but most especially of those which form primitive mountains; granite, porphyry, gneiss or micaceous schist constitute the majority, confounded with bituminous schist, freestone, pudding-stone, breccias, and other substance of secondary origin. From the primitive stones adverted to being found nowhere but in the bed of the river, we must perforce conclude that the mountains whence they are brought are themselves of primitive nature: still, as yet, the English have been unable to extend their researches beyond the banks of freestone of which the foremost tiers of mountains are composed, which banks also extend to the sea.

“ Thwarted by the different obstacles to our ulterior navigation, and destitute of the means necessary for penetrating forests through which no roads are cut, and which present no resources of any kind, my colleague and myself at length determined to return to Hawkesbury. The current of the river much facilitated our progress now, and soon did we pass the sand banks and shelves which retarded us on our advance to the mountains. We were moreover indebted in great measure for this facility to a circumstance the concurrence of which had not entered into our computation. The flowing in of the tide had raised the waters of the river about three decimeters ‡ notwithstanding we were at a distance from the sea, computing the windings of the river, of more than one hundred miles. From this observation it results: that the difference of level between the foot of the Blue Mountains and the sea shore does not exceed from six to nine decimeters §, seeing the rise of tide at Port Jackson is commonly not more than four to five feet.”

\* The river Grose.    † The Nepean.    ‡ A foot English.    § 2 or 3 feet.

After this detail of his interesting excursion, M. Bailly gives the result of his researches into the mineral productions of the county of Cumberland as follows:

"Independent of the quartzite freestone, of which the base of the country from the sea to the mountains is composed, large spaces are found covered with schist, but this is of posterior formation to the freestone, as is evident from its incumbency on that substance.

"Both the freestone and schist are horizontally disposed, or at least, in a direction very nearly parallel to the horizon; occasionally their thickness exceeds several yards, at other times but a few lines: commonly there is little adherence in the one stratum to the other, and they are readily separated.

"In the freestone cavities more or less large are found as in geodes (lithotomi cavernosi), lined with a species of oxidated hæmatites of iron, dissolved by water and afterwards deposited.

"On the beds of schist and freestone reposes the vegetable earth, of little depth near the sea, but increasing in depth in proportion to the distance from its shores, and, on the banks of the Hawkesbury River, acquiring very considerable thickness.

"Vegetable earth does not appear to be the exclusive deposit made on the beds of freestone; for there are also found on them seams of ferruginous clay, exceedingly compact, and serving to make excellent bricks.

"In other parts, and especially the vicinage of Sydney Town on the road to Paramatta, other seams are found of a whitish clay, mixed with quartz, mica, and a ferruginous matter, apparently carbonated iron. This remarkable combination which has been compared to, and does not ill resemble granite in a decomposed state, was described some years back in the Philosophical Transactions of the Royal Society of London, under the name of Sydneyte, or Sydneya, and was noticed as a new substance, although it contains no new element. This clay, or rather this mixture, is successfully employed in the manufacture of divers kinds of pottery, for which purpose several kilns have been erected at the village of Brick Field. I have seen of their production some specimens, equally remarkable for the fineness of the paste of which they were made, and for their whiteness.

"Throughout the whole extent of country occupied by the English, and in its neighbourhood, Port Stephen, for example, the river Hunter, Port Hacking, Bateman Bay, &c. not the least vestige of any calcareous stone, has hitherto been found; and, in every part, the inhabitants are fain to use for making lime the shells of oysters and other fish, of which considerable quantities are found at Botany Bay. In vain has government proffered handsome rewards for the discovery of any stratum of limestone; all search after this article has hitherto proved fruitless, nor is there room for supposing that any will hereafter be found\*.

"On the road from Hawkesbury to Tongabée, at nearly an equal distance from the two towns, we observed oxidated hæmatites of iron, in chambers. This substance was diffused in large quantities, and in masses of considerable volume, over the surface of the soil; we conjectured it could not have been brought from any great distance, and that it had been collected at this spot by some particular accident, the nature of which it would be difficult to fathom, as there is no mine yet worked in the country. This matter appeared to us susceptible of yielding excellent iron, and in a country where

\* Wilson, who in the beginning of February 1798 accompanied three convicts on an attempt to pass the western mountains, by order of the governor, at a distance of between seventy and eighty miles nearly south west of Paramatta, discovered both limestone and coal. Tr.

wood is so extremely abundant, the discovery of a mine of this description could not fail of becoming on many accounts very valuable.

"This iron excepted, no metallic substance has hitherto been discovered; and among the pebbles deposited by the river, nothing which I saw justifies the presumption of the existence of any vein in the interior of these mountains.

"Of all the mineral productions of the English colony the most abundant and useful is coal. At Port Hacking and Port Stephen immense beds of it are found, almost at the surface, and sloping in almost every direction. This coal is of excellent quality, its only fault being in its too greatly abounding in bitumen: it is used at Sydney Town for domestic purposes; and cargoes of it, freighted for Bengal and the Cape of Good Hope, have gone to very profitable markets.

"Independent of coal, which I suspect exists under the soil of Paramatta, my colleague, M. Dupuch, and myself, discovered at the foot of the mountains large masses of bituminous schistus, which burns with a very lively flame, exhales a decidedly bituminous smell, and yields a thick smoke. The pieces of this schist lose nothing of their pristine figure by combustion; fire only renders them more brittle, and deprives them of their colour. In a country destitute of coal, and in which wood should be scarce, this schistus would be a valuable acquisition.

"To the mineral substances I have previously noticed must be added *sal gemma* (rock salt), of which I understand very considerable quantities have been found in different parts of the colony; I myself saw a specimen of this article in possession of the governor, more than a foot in diameter.

"After having terminated our mineralogical observations at the foot of the Blue Mountains, and in the vicinage of Hawkesbury, we resumed the road to Paramatta, which we entered the next day. During the short stay we made here, I went to visit a tannery, which yet, indeed, was of no great consequence; but which will annually increase in proportion to the augmenting number of cattle. I saw here some seal-skins, tanned into a leather applicable to many economical uses.

"I must not conclude this narrative without noticing the liberal conduct of the governor of the colony and of Mr. Arndell. The boats, rowers, guide, and interpreter, all were provided for us by the English government; our chief even refused us the provisions necessary for the excursion."

Not only is it in its mountains and rivers, its winds and storms, that New South Wales presents a series of grand phenomena; in its vegetables and animals nature in a similar manner has every where shown herself extraordinary; the history of its inhabitants likewise adduces many striking singularities, nor must be omitted that afforded by the admirable system of colonization introduced by England on these distant shores. But the too great length of this chapter already forbids ulterior details: to another season must I delay the exposition of the valuable consequences to be expected from the last-mentioned circumstance, and first terminate what concerns our stay at Port Jackson.

I have already observed that the Naturaliste, freighted with the collections and valudinarians of both ships, was about to return with Captain Hamelin to France. In consequence of this determination Messrs. Leschenault, Faure, and Baily, the only ones of my colleagues who remained belonging to that vessel, were turned over to the *Geographe*, which, on the other hand, lost M. Depuch, too much exhausted to be able

\* Indices of copper and tin have however since the period at which our author wrote, as is reported, been discovered. Tr.

to continue the voyage with us, together with Messrs. Bougainville, the son, Mauirouard and Brue, midshipmen of the first class: these three gentlemen had the misfortune to incur the pointed hatred of our commander, and were condemned by him in consequence to this species of transportation, as well as our second physician, M. Taillefer, the same whose devotion to the relief of our sick has before been noticed\*.

These sad and last arrangements made, we set sail on the 18th of November in the morning, after a stay at New South Wales of one hundred and fifty-two days. Before, however, I resume the history of our voyage, it seems to me the more requisite I should exhibit the result of my experiments on the physical strength of the savages of the county of Cumberland, as this object is connected with several matters already known to the reader.

CHAP. XX.—*Experiments on the physical Strength of the Savages of Diemen's Land, New Holland, and the Inhabitants of Timor; on that of the French, and English.*

THAT singular æra is still fresh in the memory of all, in which individuals of celebrity, carried away by an ardent imagination, and soured by misfortunes inseparable from social life, were seen to exclaim against that state, misprize its advantages, and ascribe, on the contrary, to savages all the sources of happiness and every principle of virtue. Their fatal eloquence unsettled the public mind; for the first time, men of sense were heard to lament the progress of civilization, and sigh for that wretched condition rendered illustrious by the seductive title of a state of nature. Happily, modern voyages, by making us successively acquainted with so many nations of savages, have enabled us to appreciate the value of these vain sophisms; in this instance, our expedition will have rendered material service to sound philosophy.

Of all the advantages which the panegyrists of the state of nature attributed to savages, that on which they most especially and most generally insisted was superior strength. The consequence and companion of health, strength, indeed, if it were the exclusive appendage, or even if it were more peculiarly the endowment of the savage would certainly have given to him a title to preference, and have deprived the civilized condition of life of one of the most assured pledges of happiness. Hence have the detractors of the social system declaimed with all the powers of eloquence on the supposed degradation in this respect of civilized man; and have endeavoured to establish their opinion as a fundamental principle. Till now, indeed, means were wanting of satisfactory contradiction by an exact comparison of the strength of different individuals and nations, and no direct experiments to this effect could consequently be made. M. Coulomb, in his memoir submitted to the Institute in the year 6, had only for object to determine the quantum of daily labour which Frenchmen could affect according to the different modes of applying their strength. Prevented by circumstances from prosecuting them himself, this illustrious naturalist was only enabled to point out to others the experiments which should be made on other people, and the various modifications which climate and the quality of the food were likely to occasion in their degrees of strength. We shall have occasion shortly to demonstrate by our experiments how just his opinions were on this subject. This portion of the history of man, at the time of our

\* It is pleasing for one to be enabled to add, that our three companions, as soon as they arrived in Europe, were promoted to lieutenantcies; and that all have rendered themselves conspicuous in late engagements. As to M. Taillefer, His Excellency Vice-Admiral Decres, minister of the navy, by causing him to be appointed by His Majesty the Emperor, surgeon-major of the battalion of marines of the Imperial guard, nobly rewarded his services.

departure from Europe, was one which still further excited the interest and zeal of naturalists.

Régnier, by the invention of the dynamometer\*, had recently opened a wider field to researches of this kind. Without being perfect, no doubt, without being capable of minutely ascertaining the precise degree of strength, this instrument nevertheless presents very close approximations, and at any rate, indicates the comparative force applied with more exactitude, as I have experienced in three years' practice, than could at first be expected. This instrument I had the advantage of carrying first abroad and of employing among the people of the southern hemisphere: I neglected nothing to profit by it as largely as possible; and if from circumstances I have been prevented from giving to my experiments the latitude that could be wished, at least have I rendered valuable those which I made by their minute precision.

#### SECT. I.—*Experiments on the Savages of Diemen's Land.*

On Diemen's Land and the contiguous island Maria, exists a race of men entirely differing from that by which the continent of New Holland is peopled. In stature the individual of this race is similar to Europeans, but dissimilar in his extraordinary conformation. With a large head, especially remarkable by its length from the chin to the sciniput, he has broad shoulders, sturdy loins, and the thighs generally muscular, but at the same time almost every one has the extremities slender, long, and weak, with a big belly salient and formed like a balloon. In other matters, these people are destitute of chiefs, properly speaking, of laws, of regular government, and of arts of any kind; and are without any notion of agriculture, or of animals domesticated for service; they wear no cloaths, have no fixed abode or shelter but what is afforded by wretched screens made of bark to defend them from the cold southern blasts; nor have they any other arms but the club and the spear. Constantly a wanderer amid the forests or along the shores of the sea, the inhabitants of these regions undoubtedly possess every characteristic of uncivilized man, and pre-eminently merits the distinction of the child of nature. Still, how widely does he differ, either regarded in a moral or physical point of view, from those delusive portraits of him, the offspring of fancy and enthusiasm, which system-makers have drawn, and placed in competition with man in social life!

With men so brutal as we found these to be, our communications, if not rare, were difficult and accompanied by danger; and, as will have been seen, the chief of our interviews with them terminated, on their part, in hostile aggression.

If our general communications with them was so spare, our dynamometrical observations were still more so. Hence, spite of exertion, have I been enabled on these shores to obtain but few data, and those incomplete, as I was unable to induce any of the inhabitants to try the strength of their loins. However, as all my experiments were made on individuals of the strongest constitutions, and as their results were clear and similar, we may fearlessly apply them generally to the individuals of this first race: now these results uniformly exhibit a want of strength truly extraordinary. For, though my experiments were repeated on the most vigorous class of the population, that between eighteen and forty years of age, no Diemenese was found capable of making the needle advance beyond 60°, and twelve observations on different individuals gave for a mean 50,6°. We shall presently see the difference between this and the mean of experiments made on Europeans.

\* The description and use of this instrument, illustrated by a plate, may be seen in Vol. I. p. 399. of the Philosophical Magazine. Tr.

## SECT. II. — *Experiments on the Savages of New Holland.*

New Holland, from Wilton's Promontory in the south, to Cape York in the north, appears to be inhabited by a second race of men, differing essentially from any hitherto known. The stature of these men is nearly the same as that of the inhabitants of Diemen's Land; but, independent of other characteristics, they differ from the race precedingly described, in the lighter colour of their skin, in the nature of their hair, which is sleek and long, and in the remarkable shape of their head, which is smaller, and, instead of being longer from their chin to the sciniput, is in measure compressed at the crown. The back of this people is likewise in general less broad: in other respects the same disproportion exists in them between the trunk and the members, the same weakness and slender shape of the latter, and, in many instances, the same tumefaction of the belly. For what regards the social state, the inhabitants of New Holland are hitherto unacquainted with agriculture, or the use of metals; like the inhabitants of Diemen's Land, they go without raiment, and are destitute of laws, worship, arts, or any assured means of support; being obliged, like the Diemenese, to depend on the forests or the sea-shore for their sustenance. But among these already are the first elements of social organization perceptible: the different hordes comprize a larger number of members; they have chiefs; their dwellings, though built in a coarse style, are more numerous and of superior structure; their arms are more varied and formidable; they are more venturesome on the water; their mode of hunting is more regular; and their wars more general; already they respect the rights of nations in some degree; and, finally, they have tamed the dog, and make him their companion in hunting and in war. But again, equally brutal with the people of Diemen's Land, they are even more averse from strangers. Dampier, Cook, La Perouse, and Flinders, at different places, and at different periods, have been obliged to repel their insults by fire-arms, and we ourselves avoided having recourse to this expedient only by taking to flight.

Seventeen savages of the southern continent made experiments of their strength by the dynamometer, among whom fourteen were between eighteen and forty years of age, and consequently of that period of life when man is strongest. Still the same characteristic of weakness observed among the Diemenese was apparent here. One alone caused the needle to advance to  $62^{\circ}$ , and the mean strength of the fourteen individuals scarcely exceeded  $51^{\circ}$ . Some indeed were so weak as scarcely to be able to raise the needle to  $40^{\circ}$ .

The strength of their loins furnished, on experiment, the same results: if the young Ooroo Maré be excepted, who caused the needle to rise to  $19^{\circ}$ , none were able to make it advance so far as  $18^{\circ}$ ; and so much inferior was the renal strength of the remainder as to give scarcely  $14.8^{\circ}$  for a mean.

## SECT. III. — *Experiments on the strength of the inhabitants of Timor.*

In ascending from the Diemenese to the people of New Holland, we reach the first removal from the pure savage; in order to perfect the scale of gradation from the state of nature to the approximation towards social order found in the inhabitants of Timor several steps are wanting: the second removal might be exhibited by the people of New Guinea; a third by those of New Zealand; a fourth, according to the most authentic accounts, by the races inhabiting the great equatorial ocean; and the population of Timor

Timor and the Molucca islands would constitute the fifth remove. Unfortunately three of the intermediate gradations have not yet been sufficiently examined to justify any positive assertion respecting them, I shall therefore limit my observations to an exposition of the result of my experiments on the Malays of Timor, and the neighbouring islands Pooloo Rotti, Soombawa, Serhawoo, Macassar, Ende, and Solor. Of similar descent, inhabiting the same climate, subject to the same laws and customs, and subsisting on similar aliment, all of these may, I conceive, be classed together without any sensible error; and with these likewise some Chinese, who for centuries established on these islands from father to son, may be looked upon as indigenous.

The Malays are not the aborigines of the islands of the great archipelago of Asia. Brutal and sanguinary conquerors, they invaded them at a period of which history or even tradition preserves no recollection. Established on the shores of the sea, they are collected together in numerous and regular societies, and inhabit towns or villages of great or small extent. Subject to Kings possessed of different extension of authority, and, by their commerce with Europeans, raised to a tolerable degree of civilization, they exercise different arts, addict themselves to agriculture, and the care of flocks, to fishery, trade, and navigation, as fully as their natural apathy and desire of gain allow. Offspring of the ferocious warriors of Malacca, they preserve the language of their ancestors, their manners, customs, laws, and religion, but, by long subjection to the Portuguese and Dutch, they have happily lost a portion of their original ferocity.

Fifty-six individuals of this generation were subjected to my experiments. In them was noticed; that between eighteen and thirty years of age strength encreases, so as at the latter nearly to double the degree exerted at the former period; that it augments but trivially from thirty to forty; and that it gradually diminishes from forty to fifty, and from fifty to sixty. These experiments moreover gave for the mean degree of manual strength  $58,7^{\circ}$ ; for that of the reins  $16,2^{\circ}$ .

#### SECT. IV. — *Experiments on the strength of the French.*

With savages, or those but slightly civilized, such as those of which we have spoken, dynamometrical observations are more correctly obtained in a general point of view than can ever be the case among Europeans. Our numerous population, the diversity of professions followed by the individuals of which it is composed, our habits of life, aliment, &c. prevent any fair comparison; for in order to find the mean strength of a nation, of the French for example, such a multitude of experiments would be necessary on subjects taken from all classes of society, as to render a just conclusion next to impossible. Not so with hordes of savages, especially those of New Holland and Diemen's Land: in these parts the population is so thin that the most numerous tribes consist scarcely of fifty individuals; and here all difference of rank, exercise, and food is unknown: with similar wants and similar resources all have the same labours to follow, the same privations to undergo, and indulge in the same enjoyments. This uniformity, constantly existing through every stage of life, occasions a physical and moral similitude in these individuals of which no idea can be formed in social life. Hence I do not hesitate, notwithstanding the small number of observations made by me on the inhabitants of Diemen's Land and New Holland, nay, even of Timor, to look upon the results as much more precise than a more numerous series of experiments made on European nations could possibly be. I am therefore far from disposed to deduce any consequence, from the few dynamometrical experiments made on the English and French, decisive of the actual strength of these two people. I merely present them as

affording



affording specimens by which a better judgment may be formed of the weakness of the savage nations before noticed ; which specimens also are the more adapted for this purpose as the individuals on whom the experiments were made, were of similar ages, and of different professions ; merchants, military men, judges, naturalists, physicians, sailors, &c. ; and as the experiments were made by them while under the influence of the same climate.

The manual strength of seventeen Frenchmen gave for a mean  $69,2^{\circ}$  ; that of the loins  $22,1^{\circ}$ .

#### SECT. V. — *Experiments on the strength of the English.*

The mean result from fourteen experiments made on Englishmen, gave for the strength of the hands  $71,4^{\circ}$  ; for that of the loins  $23,8^{\circ}$ . The slight difference between this result and that of the experiments on the French, may possibly have been occasioned by the latter having returned from a long sea voyage, while the English, who tried the dynamometer, were principally those resident on shore \* : other little circumstances, local or individual, might likewise have been the cause of the difference ; whence, to draw any deduction as to the relative force from these experiments would be ridiculous.

#### SECT. VI. — *General result of experiments on the strength of the savages of Diemen's Land and New Holland, of the inhabitants of Timor, the French and the English.*

Combining the results of the series of experiments on the four different nations, it follows that the manual strength at a mean was in the following proportions expressed in kilogrammes and lbs. avoirdupois.

		Kilogrammes.	Lbs. avoird. and decimals.
Of the people of Diemen's Land	- -	50,6	111,57
----- New Holland	- -	51,8	104,21
----- Timor	- -	58,7	129,43
The French	- - -	69,2	152,58
The English	- -	71,4	157,43

The force of the loins in the undermentioned, expressed in myriagrammes, and lbs. avoirdupois, were

		Myriagrammes.	Lbs. avoird. and decimals.
Of the people of Diemen's Land	- -	14,8	326,32
----- New Holland	- -	16,2	357,19
----- Timor	- -	22,1	487,28
The French	- - -	23,8	524,77
The English	- -		

Hence there may be drawn as conclusions,

1<sup>st</sup>, That the inhabitants of Diemen's Land, the most perfect savages, and those who pre-eminently deserve the name of the *children of nature*, are of all the weakest.

\* The only exception was the captain of a merchantman, of the name of Smith, whose manual strength was exceeded by that of Michaux alone on the part of the French, the compression of the instrument by Smith giving 79, by Michaux 82 ; but if Smith found a superior in manual strength, in strength of loins he surpassed all, either French or English, the dynamometer giving for his draught banding on the foot of the instrument, and pulling upward, 31 myriagrammes, while the most powerful among the French, Lieut. L. Freycinet, could only draw the needle to 29,5. TR.

2d, That the inhabitants of New Holland, a degree removed from the former towards civilization, are much inferior in strength to those of Timor, though in a slight degree stronger than the Diemenese.

3d, That the inhabitants of Timor, both in the hands and loins, are vastly weaker than either the English or French.

And from these conclusions may further be deduced :

That physical strength is not always the greater in proportion to the decrease of civilization ; and that it is not a uniform and natural consequence of a savage state.

Such are the deductions from the experiments I was enabled to make with the dynamometer during a long and tedious voyage : I did intend to continue them at the Cape of Good Hope upon the Hottentot race ; but the interest of science impelled me to make a sacrifice at the Isle of France of the instrument to which I was indebted for these ascertainments. I delivered it, by direction of the governor of the colony, to M. Chapotin, chief physician, and may reasonably presume that in his hands it will produce new information. No country indeed is better adapted than the Island of France for observations of this description, where, on a limited space, the inhabitants of all climates are collected : the negro from the banks of the Senegal and the Niger, the fierce Yollof, the proud Malyache, the warlike and colossal Caffre, the robust inhabitant of Mozambique, in short, all the black legions of Africa are here confounded together ; here too are seen the cruel Malay from the rocks of Macassar, and the peaceful inhabitants of the Sunda, and Molucca islands ; the indolent, weak, and gentle race which drink the waters of the Indus and the Ganges, are numerous there ; and some of the individuals of the islands of the great ocean begin to make their appearance : finally, thousands of ships annually touch here from all quarters of the globe. What valuable information, provided experiments with the dynamometer were carefully made by an intelligent man, might there not therefore be obtained from such a multiplicity of nations, so different one from the other ! But, without anticipating the advantages of a work of this kind conducted with propriety, I shall make some general remarks on the presumptive causes of the weakness of the three nations of which I have spoken.

SECT. VII.—*On the presumptive Causes of the Weakness of the Inhabitants of Diemen's Land, New Holland, and Timor.*

Having established the fact by direct experiments of the very remarkable weakness of the people of Diemen's Land, New Holland, and Timor, the enquiry follows : is this weakness to be attributed to their mode of life and the absence of civilization ? This problem, as difficult as it is interesting, doubtless requires for its solution a greater number of data than I have collected ; still these appear to me susceptible of throwing much light on the question.

Modern physiologists agree that, every thing in other respects being the same, bodily strength is best created and maintained by abundant and healthy nourishment, and by constant and moderate exercise. A temperature of the atmosphere inclinable to cold is regarded as a third advantage, though of less general consequence, and less indispensable than the preceding. Regarding these as causes, the reverse of them must be liable to produce opposite effects. These elements admitted, the causes of the weakness of the nations in question should, in my esteem, appear equally simple and efficient. To prove this it will be sufficient I should in a succinct manner recapitulate the physical state of the country, on which by nature these different people are placed.

*1st. The Inhabitants of Timor.*

The large island Timor, too little known to Europeans, and especially to naturalists, is, in every respect, one of the most fertile the world can boast. Without digressing into a display of its vegetable and animal productions, it may be sufficient I should observe that every kind of fruit peculiar to the climate of India is found here in profusion, without requiring of man any other labour than to gather it: rice is of superior quality; the most valuable roots, potatoes, ignames, manioc, and many others unknown to me, are in greatest plenty; in fine, the vegetable kingdom exhausts here all its stores.

In the animal region nature is equally profuse. Round the cabin of the indolent Malay are constantly seen immense swarms of poultry, ducks, pigs, goats, sheep, buffaloes, horses, &c. All the neighbouring forests abound in flocks and herds of these animals, again become wild and wanderers. To these add numerous legions of monkeys and enormous bats, the flesh of which is held a luxury by the Malays, and is truly tender and delicate; and it must be granted that here the inhabitants have nothing left to wish for. I say nothing of birds, however various their genera and species, since amid such profusion they are altogether disregarded. The rivers yield abundance of excellent fish; but nothing can compare for fecundity with the sea-shore of Timor, as all the naturalists of Paris may conjecture from the prodigious quantity of crustaceous and testaceous animals, fish, molluscæ, zoophytes, &c. which M. Lefueur and myself have transmitted. These are obtained at pleasure, and without the slightest labour; all that is required being to go down to the sea-shore at low water and select with the hand any of these animals, found in shoals in small hollows among the madrepores, where they have been left by the tide, the water filtering through the madrepores, and leaving the small pits dry.

With respect to aliment, therefore, no people was ever more amply supplied, nor more kindly dealt with by nature: excellence, abundance, and variety await merely selection; in point, therefore, of sufficiency of nutriment nothing is wanting for the production of strength in man.

Unhappily this facility of satisfying the wants of life, this superfluity afforded without either care or labour, have generated a universal apathy, an indifference, nay, an aversion for toil so great among this people, that the very thought of it is sufficient to render them melancholy. Part of the day as well as the night, the inhabitant of Timor is seen seated on his heels, beneath the shade of a tamarind or palm-tree, a bananin or a mangle, incessantly chewing his betel and drinking caloo; twice or thrice in the day he takes a slender meal; now diverts himself with a kind of guitar made of the bamboo and a leaf of the latanier; now weaves some little mats or other trifling works of no exertion; and now again spends hours in bathing, combing his hair, and rubbing himself with oil of cocoa, sleeping at intervals of both day and night. As for slaves, they are so numerous in every house, such little work is exacted of them, and this is done with such deliberation, that they live a life as idle almost as their masters. From this picture of their habitude this people must be regarded as sunk into a permanent state of inaction and rest. Does not a mode of living such as here described appear sufficient to account for that weakness denoted by the dynamometer, and which indeed is not less evident from their conformation? In fact, without being so weak in their limbs as the people of Diemen's Land and New Holland, the Malays of Timor in these parts are defective of strength and but little muscular; in consequence they possess a roundness and grace much superior to what is observable in Europeans, and naked, as they commonly are, appear with singular elegance.

From

From these remarks will be gathered that the extreme inactivity of the people of Timor is the essential cause of their want of vigour.

Still, conducive to it is the temperature of the island, and that hot and moist atmosphere whose baneful effects on health we experienced so fatally. Preserved in some degree from its morbid influence by cold baths, by friction, by a multiplicity of bitter and aromatic substances, but most especially by the preparation of betel, which they use for restoring its tone to the stomach, the debilitating powers of the humid atmosphere are still felt in spite of the neutralizing antidotes.

These last facts correspond with the results obtained by M. Coulumb, whose testimony, valuable in itself, is further corroborated by numerous experiments. "The mean capability of labour in man," says he, "varies according to the climate. I had the direction of considerable works at Martinico, in which the troops were employed, where the thermometer is rarely below  $20^{\circ}$  \* : the same kind of works were executed also under my inspection in France; and I can from experience safely affirm, that in  $14^{\circ}$  of latitude, where men are constantly bathed in their perspiration, they are incapable of half the daily labour to which they are accustomed in our climates."

The high temperature therefore of Timor, the constant dampness of the air, and the indolent life of the inhabitants, in my opinion, furnish collectively a satisfactory explanation of the weakness peculiar to the first of the three people of which we have to speak. But here we must allow that the degree of civilization does not appear to have any essential or immediate influence on the strength of the people. Far otherwise is it with the Diemenese and the inhabitants of New Holland.

## 2d. *New Holland and Diemen's Land.*

Nature seems to have acted the part of a step-mother towards the people of these regions. The vegetable kingdom scarcely yields any thing : never did we meet here with any edible fruit that grew to the size of a cherry ; nor are any nutritious roots known other than of fern or archys. Neither does the animal kingdom present any species of tolerable dimensions but the cassowary and the kangaroo, both the one and the other become rare on the continent from their being so constantly pursued. The fishery indeed might furnish a more abundant resource for the inhabitants, and one more certain ; but the imperfection of their instruments and mode of fishing, winter with the inhabitants of Diemen's Land, frequent storms with those of New Holland ; and, above all, the migrations of the fish, all concur to render this last dependence precarious, and sometimes absolutely null. Then it is that those dreadful famines take place, the lamentable consequences of which Governor Phillips had himself occasion to witness shortly after his arrival : "There," says M. Collins, "the unfortunate natives were reduced to such a starved condition, as to resemble so many skeletons, and seem on the point of perishing." The productions of the sea are of no avail even to those repulsed to the interior of the country : these subsist on frogs, lizards, serpents, various larvæ, and particularly on the large snails which collect in bunches big as the head round the branches of the resinous eucalyptus. Spiders even, as in New Caledonia, form part of their disgusting food : in many instances these wretched hordes are reduced to live on certain herbage and the bark of trees ; in fine, there is nothing, not even the numerous ants which devastate the soil, but they are forced to use for

\* Here Reaumur's thermometer cannot be meant, but the centigrade, as on the former  $20^{\circ}$  is equal to no more than  $68^{\circ}$  of Fahrenheit, whereas the temperature of Martinique is constantly higher than this. By the centigrade thermometer  $20^{\circ}$  is equal to  $77^{\circ}$  of Fahrenheit. T.R.

nutriment. M. Collins \* describes the horrid paste prepared by the natives, by grinding these insects and thin larvæ, and mixing them with the roots of fern; a shockingly repulsive practice which the most hideous famine could alone originate, and of which a parallel, I think, can in no country be found.

Affuredly, similar aliments are little suited to engender bodily strength; and in this particular, we shall seek in vain for human beings more deficient.

With respect to exercise: in lieu of moderate and constant exertion, the savage of these parts, impelled by the imperious cravings of hunger to seek for aliment, for days together undertakes tedious and fatiguing excursions, his long courses knowing no other intermission than what are exacted by fatigue and exhaustion. Should he chance to find abundant means of satiating his hunger, a stranger to other considerations than glutting his voracity, he never abandons his prey, but abides on the spot where it was found till necessity compels him again to renew his laborious chase. Now, what can be more destructive to the expansion of strength, and the harmony of the functions of the body, than these alternations of excessive fatigue and absolute rest, of distressing want and gluttonous excesses? In this second part of the mode of subsistence pursued by the people of New Holland and Diemen's Land, we see another general cause of weakness, extremely powerful in itself, and which is of constant recurrence at every stage of life of these unfortunate men.

May not the cause last alluded to, joined to the scarcity, the occasional absolute want of aliment, and the bad quality of that they frequently use for deadening the pangs of hunger, have either originated, or much increased that slenderness and excessive emaciation of the extreme limbs of those men? Yet, remarkable as it certainly is in this people, this characteristic does not appear to shew itself in them in an equally surprising degree as with the wretched *Pescherais*, of the *Terra de Fuego*. "Their shoulders," says Forster, "and breast are broad and brawny; the rest of their body is so slender that, on separately observing the different parts, we could scarcely persuade ourselves they belonged to the same individual †."

Doubtless the conjecture is far from improbable, which ascribes a vicious conformation so general and so evident to a radical defect in the organization common to these people, a people which in so many other instances materially differ from the rest of the human race; still, if regard be had to the circumstance of individuals occasionally being found among them, the proportions of whom are much more regular than in the majority; if also one computes on the natural tendency of famine, and excessive fatigue, and faulty nourishment, to impair the form of, and desiccate and wither the human frame, (phenomena observable, according to M. Volney, among several Arabs of the desert,) perhaps one may not be far from truth in attributing the defective conformation of the people in question principally to the constant state of wretchedness and want in which they live. This is the opinion of most of the intelligent Englishmen at Port Jackson; it is that also of M. Collins, and certainly one to which it is difficult to refuse assent.

Allowing then the weakness of this race of men to devolve essentially from want, the bad quality of their food, and excessive fatigue, these causes in their turn are assuredly the consequence of the wild life of these savages.

Let us now look to the probable, nay, certain results of a departure from this wild life, an abandonment of their ferocious and vagabond habits. Let us suppose these people collected together in more numerous societies, resident in villages, and peace, with general consent, succeeding to those eternal and sanguinary wars which destroy so

\* *Descrip. of N. S. W.* p. 558.

† *Cook's second voyage.*

much of the population : property now will excite emulation, and the necessity of preserving this property from individual depredation, induce the union of the force of the male, and the formation of laws or general conventions. In this state, not superior to that of the Kamtschadales or the Samoyeds, however distant from a perfectly civilized condition, yet, what a beneficial change would be effected ! and how much would their resources be encreased.

Here fancy fondly pictures the domesticated kangaroo swarming around the cabins of the improved natives ; the cassowary, even more readily tamed, presenting them daily food, and its large and excellent eggs ; the black swan, multiplying its broods on the neighbouring waters ; and the beautiful lyre-tailed pheasant, with the superb minura of the Blue Montains, repaying, with their numerous progeny and their eggs, the attention and care of their masters.

Leisure, a communication of ideas, co-operation of efforts, effects which can only exist where men are collected in a body, by degrees will engender improvement in the arts of life, and furnish them with more numerous and perfect instruments for fishing. With much diminished toil will they obtain from the shores of the sea a more abundant produce, and soon will learn to preserve their fish by drying, or the use of salt, thus providing against those seasons when storms or winter's sway deprive them of daily supply. Their boats too, now of better construction, will allow them to lengthen their excursions from shore ; the neighbouring islands will cease to be unexplored by them ; and the numerous seals and sphenici, with which they abound, will furnish them with a prey as easy of capture as inexhaustible ; the oil from them will give a new flavor to their food, and their spoils afford warmer clothing to shelter them from cold ; by degrees, the beautiful goose of Bass's Strait will be added to their poultry yards, and the wombat or phascolome, that singular animal so offensive to the eye, yet such tender and delicate food, and which we ourselves noticed, as familiar as the dog in the cabins of the English fishermen, the wombat will become domesticated among them ; and the grey kangaroo, the flesh of which is so far preferable to that of the larger species, will be another boon of these islands, an addition to the resources of the people.

There is certainly nothing exaggerated in this picture, yet what a contrast does it not present to the present condition of these savages ! They become secure of subsistence, and cease to be dependent on the seasons, or the shoaling and migration of the finny race ; their aliment too, as well as more abundant at all times, is of superior quality. No longer subject to distressing privations, to those excessive fatigues, and perpetual and exhausting chaees, which consume his vigour, and impair his form, the present savage will, in his changed condition, become of a constitution more robust ; his strength will at the same time be encreased : and if the defect of his conformation be, indeed, as every thing seems to indicate, the consequence of his present wretchedness, and bad and scanty fare, may we not reasonably forebode that this frightful emaciation will gradually disappear ?

Not only will this happy change be beneficially experienced by each individual, its effect will be to encrease the population. No more, as now is the case on these dreary shores, will the woman be obliged, from dread of incapacity to support her offspring, to use the most cruel means of procuring abortion \* ; no more will fathers, unnatural from

\* When in New Holland a woman has two children at a birth, whether males or females, the weakest and least heavy is immediately strangled by the mother ; if of the two one should be a male, and the other a female, the latter is put to death. (Observations communicated by M. Leschenault, and attested by some of the most respectable inhabitants of Port Jackson.)

necessity, crush to death, with stones, the too tender progeny of the deceased mother, as is related to be their practice, by Mr. Collins, (Appendix, No. XI.), and as we have been credibly informed is the fact. Barbarous expedient, which, however, the wretchedness, the poverty, of this miserable race, have hitherto rendered inevitable, and which similar circumstances render but too common among savages in several other countries.

#### SECT. VIII.—*General Results.*

From the assemblage of facts exposed in this memoir, the following general results are deduced.

1st. That the inhabitants of Timor, New Holland, and Diemen's Land, vastly behind the French and English in civilization, are nevertheless considerably weaker.

2d. That the moist and hot temperature of the island of Timor, with the too indolent and inactive mode of life of its inhabitants, are apparently the causes of their inferior strength.

3d. That in Diemen's Land, and in New Holland, want of food, the bad quality of that on which the inhabitants subsist, and the fatigues they undergo in obtaining even this, appear to be the primary causes, not only of their want of strength, but also of their defective conformation.

4th. That this continual want of food is exclusively the consequence of the mode of life of these people; and that this mode of life, so long asserted to be productive of bodily strength and vigour, is on the contrary, in this instance, proved to be the source of extreme debility.

And 5th. That the probable effect of an advance towards civilization on the part of these savages will be an expansion of greater strength, and the disappearance of their present defective conformation.

What then must we think of those eloquent exclamations against the social state, founded as they are on the superior strength of the savage, or, using the language of the sophists, of the child of nature? What of the doctrine that the physical powers of man are in an inverse ratio to the progress of civilization?"

#### CHAP. XXI.—*Memoir relative to the new Genus Pyrosoma\*.*

LONG as the study of molluscæ and soft zoophytes was neglected by naturalists, a still longer time elapsed before these animals excited the attention of travellers. For this indifference on the part of one and the other various causes may be assigned.

Among these causes may be reckoned, the disgust which the majority of these animals excite; their whimsical and inconstant figure, equally difficult to describe, to draw, or to preserve; their colour, most commonly dull, obscure, and displeasing; their soft and viscous nature, disagreeable to the touch; in many species, acrid and corrosive fluids; in all, a rapid and almost instantaneous decomposition.

An additional cause was the little interest they occasioned, owing to the supposed inutility of the study; for naturalists were far from imagining such important results could be drawn from a branch of the animal system so much despised and so repulsive, as M. Cuvier has succeeded in effecting; or that it might some day throw fresh light on

We so frequently have had occasion in this first part of our history to speak of molluscæ and sea zoophytes; and shall have so often to revert to these singular animals, that some general remarks appear to me necessary respecting them before I continue the detail of our voyage; to these I have added, the history at length of one of the most extraordinary genera of this great family of marine animals.



anatomy and physiology, and change the aspect of several other portions of natural history.

Moreover, the greater part of these animals are either dispersed over the shores of the ocean, or in its bosom; are far more difficult to preserve than to describe; and, finally, good works were wanting to direct the observer in this difficult study.

Fortunately I found myself placed in circumstances far more favourable than any preceding traveller to prosecute this study. The idea of its uselessness had given place to its being regarded with interest, which consequently acted as an incentive to inquiry; and having studied four years under M. Cuvier, I had not only his method and elements for my guide, but in addition, manuscript instructions with which he had the kindness to furnish me.

What I applied myself to describing with much minuteness was, at the same time drawn or painted by my colleague and friend M. Lesueur with that skill and precision which have earned him such deserved applause, and all our remarks and sketches were made from living subjects.

And finally my researches receive additional value from the immense field in which during four years they were made. Twice did we traverse the whole length of the Atlantic, twice double the Cape of Good Hope; as often did we make the tour of Diemen's Land and double the most southern cape of this part of the world; five or six times we sailed through Bass's Strait; at two different dates we coasted a part of the eastern shores of New Holland and the south-western shores, even more interesting than those; twice did we visit the archipelagos of St. Peter and St. Francis; twice range the seas which beat on Nuyt's Land; twice we doubled Cape Leuwin, and as many times explored the coasts of Edels, De Witts, and Endraght's Land; our navigation extended as far as to the Arrow Islands, nor did we arrive in Europe before we had four or five times crossed the Indian Ocean, and seven times passed the tropic of Capricorn in different longitudes, having thus sailed through more than 100° of latitude and 190° of longitude.

Let the reader figure to himself that throughout so many different regions one of my most constant and cherished employments was collecting and making remarks on the animals in question, and that, alternately suspended from the side of our vessel, M. Lesueur and myself suffered, as I may say, not one to escape us, and he will be enabled to compute the importance of our observations on these animals. Nor do we shrink from repeating the public declaration of the professors of the museum of natural history, and the commissaries of the institute, that no previous discoveries in this branch have been either so important or complete. Not only did we double, or even triple the number of species of all the genera before known, we likewise furnished many specimens which cannot be classed under any of these genera, and which consequently must form new heads.

First among these new genera stands the one which forms the subject of the present memoir, and which was noticed with admiration on the waves of the Atlantic ocean, during our voyage from Europe to India, by all on board both our ships. Its truly prodigious phosphoric property, renders it one of the most beautiful zoophytes known, and its organization ranks it with the most extraordinary.

## PYROSOMA.

*Corpus gelatinosum, rigidiusculum, liberum, tuberculis asperatum, subconicum, extremitate ampliore apertum, vacuum, aperturae margine intus tuberculis cincto.*

## PYROSOMA ATLANTICUM.

*Æquatorio-Atlanticum, gregarie-pelagi-vagum, vividissime phosphorescens, coloribus eximiis tunc effulgens, 22° R. (71.6° Fabr.) coequalioribus occurrens in undis ; 10, 12, 14, 16 centimetros (digitos Ang. usque 6½) æquans.*

FOR a long time we had been detained by calms in the middle of the equatorial regions, and were unable to advance towards the south, except on occasion of the slight hurricanes peculiar to these climates, known to French mariners by the title of grains des tropiques, when, on the 4th December, in the evening, we experienced one more violent than common, the sky was every where obscured by big clouds; the darkness was extreme, the wind blew with great force, and our ship made great way through the water. Suddenly we distinguished at some distance a large scurf, as of phosphorus spread over the waves, and occupying a considerable space before us. The spectacle accompanied by the circumstances I have noticed, possessed somewhat romantic, grand, and imposing, which attracted the attention of every one. Every body ran on deck to enjoy the singular appearance. In a little time we reached this fiery part of the ocean, and perceived that this prodigious splendor was occasioned by innumerable animals, which, borne upon, and carried along with the waves, floated at different depths, and appeared of different forms. In fact, those most deeply floating, their form in part concealed, resembled large masses of burning matter, or rather enormous red hot balls, while those on the surface of the waves were like incandescent cylinders of iron.

Every naturalist in each ship was anxious to obtain some of these singular animals, and on board the *Geographe*, M. Mange was the first who procured any. He was so fortunate to draw up thirty or forty, on which I was enabled to make many observations.

All these animals resembled each other in form, colour, substance, and phosphoric property, and differed only in size, which varied from 10 to 16 centimeters \*; all of them were separate and not connected together.

They were of an elongated, and nearly cylindrical form; their fore part was the larger, and perpendicularly truncated, a wide circular opening admitted a view of the whole inside of the animal, which was tubulolous and empty, exhibiting no other vestige of organs than a very delicate viscular net-work, which line the whole interior of this cavity. A ring of large tubercles occupied the whole of the interior raised rim of the opening of the fore-part, and thus diminished to nearly one-half of its size the diameter of this species of mouth. The hind-part of the animal of smaller breadth than the fore-part, and obtuse, shewed no trace of any opening whatever, even when observed with the microscope.

The whole exterior of the animal bristled with large and unequal elongated tubercles of firmer substance than the other parts of the animal, more diaphanous also, and

\* 4 to 6½ inches.

brilliant and polished as the diamond : in this part is the principal seat of the wonderful phosphorescence of which I shall presently speak. Between these large tubercles others shorter and more obtuse are perceptible, nearly joining each other, and endowed as the larger with a phosphoric property.

Finally, within the interior of the substance owing to its transparency, are seen a multitude of small glands, very narrow, and about a millimeter in length \*, which likewise participate in a very high degree a phosphorescent nature.

The colour of these remarkable zoophytes when at rest and after death. is an opal yellow, mixed with green, displeasing to the eye : when, however, in their movements they contract themselves, whether spontaneously, or on being irritated, the animal instantaneously assumes the appearance of molten iron, and shines with much splendor ; but, as that metal in proportion as its heat diminishes assumes divers shades of colour, so this animal as its phosphorescence disappears, exhibits numerous shades of colour, extremely pleasing to the eye, light, and varied ; for example, red, the blush of morn, orange, greenish, and an azure blue : this last shade of colour especially is equally lively and pure. With this shade it is represented by M. Lefueur, not only on account of its being that of all it assumes the most graceful, and best suited to give a just idea of this charming species, but also because of its being intermediary between the red of molten iron which it exhibits in its highest state of phosphorescence, and the greenish opal yellow of its state of quietude.

With respect to the phosphorescence itself, whatever its nature may be, whatever means be employed for its production and maintenance, it constantly, in this species, shews the characteristics of a regular and natural function. Indeed, if in a vase of sea water several of these animals be placed, they are seen at regular intervals to experience alternate motions of contraction and expansion, analogous to those occasioned by respiration and drawing breath in more perfect animals. At each contracting motion the phosphorescence takes place, and afterwards insensibly diminishing entirely disappears, till again produced by a new contraction. The appearance of the phosphorescence may at pleasure be procrastinated by irritating the animal, either with touching it or shaking the water in which it swims. In every instance this phosphoric property so completely depends on the organization and life of the animal that it totally ceases when life becomes extinct. Nor indeed is this a peculiarity of the pyrosoma, for the same takes place with all other marine animals of phosphoric nature.

The locomotive faculty of this animal appears even more enveloped in obscurity than its vital functions, and is very limited : it seems, in fact, to consist exclusively in the slightly contracting and dilating movements I have noticed, the necessary effect of which will be to occasion a trifling impulse on the water and consequently a retrograde recession.

Of what regards the mode of nutrition of this animal I confess that I have no positive knowledge, and merely give the following as a matter of conjecture. I have mentioned the ring of large tubercles disposed round the inside of the opening in the fore part of the body, and narrowing nearly to half its size the diameter of this kind of mouth ; may it not be possible that the animal aware from the irritation they will cause of the entrance of small molluscs with the water into the tubulous cavity noticed, is enabled to contract itself to such a degree as to close the opening of the ring ? The small molluscs thus confined within the tube, and unable to escape, in this case may there undergo a kind

\* The 25th part of an inch.

of decomposition and dissolution which may render them capable of being absorbed by the extremities of the vesicular not described.

Still more obscure and difficult of comprehension than the mode of its nutrition is the system of generation of this animal. As in certain polypi to which class this genus belongs is regeneration effected by a sort of excrescence? Do those long tubercles of the animal after attaining a certain "maturity" become separate and form other animals? And, in this case, are the smaller, and more depressed tubercles which cover the remainder of the surface designed by nature to replace the greater in proportion as they fall off themselves in turn to become organized beings? I confess this opinion is conjectural, and altogether unfounded on exact observation, still, when we reflect on the simple organization of these animals, and on the prodigious number of them that we remarked, which necessarily employs a rapid multiplication, one possibly may not be wide of truth in admitting this opinion which at once agrees with the simplicity of the organization of the animal and its prodigious multiplicity and appears to be sanctioned by analogy.

I must not here, however, omit to add that, notwithstanding our long and various navigation through so many different seas, we never met with a second tribe of this species. The spot where they were distinguished by us was between the 19th and 20th degree of western longitude, from the meridian of Paris, and the 3d and 4th degree of north latitude. The temperature of the sea at the surface was then 22° of Reaumur\*. I carefully note these circumstances; as it must be observed that the various species of zoophytes and sea mulluscæ are not scattered by chance over the ocean, but are each limited to certain latitudes and longitudes, and are constantly found on the same spots, where probably the temperature more than any thing else determines their abode.

71, 6° of Fahr.

END OF THE ELEVENTH VOLUME.











